MEDICAL HISTORIES

AND

REFLECTIONS.

VOLUME SECOND.

BY

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ΜΙΚΡΑ ΤΕ ΜΕΓΑΛΩΝ, ΚΑΙ ΟΛΙΓΑ ΠΟΛΛΩΝ.

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PREFACE.

At this time, when the attention of the medical world is supposed to be again fixed on system and hypothesis, some apology may seem necessary for the publication of a work, conducted on the strict principles of inductive philosophy. The favourable manner in which the former volume of these Essays was received, emboldens me to lay

lay before the public the fruits of two years' additional labour: and I am encouraged by considering, that the most splendid theories must be ultimately judged by careful, and repeated observation.

I confess myself to be among the number of those who think, that after all the improvements in medicine, to which the present century has given rise, the science is not ripe for a final arrangement. Physicians have not pursued the instructions of Bacon, for a period of time sufficient to have fulfilled his intentions; and I cannot perceive, that

that any of our most daring, or curious enquirers, have deviated, with advantage, from the prospects of that great mind. We may even obtain, from his own words, a just representation of the present state of medical philosophy, if allowance be made for the quaintness of his mythological allusions. "To "say the truth, I am of this "opinion, that those two facul-"ties, *dogmatical* and *empirical*, "are not as yet well joined and "coupled together, but as new "gifts of the gods, imposed "either upon philosophical "abstractions, as upon a flying "bird,

" bird, or upon slow and dull
" experience, as upon an ass.
" And yet methinks, I would not
" entertain an ill conceit of this
" ass, if it meet not with the ac-
" cidents of travel and thirst.
" For I am persuaded, that who-
" so constantly goes on, by the
" conduct of experience as by a
" certain rule and method, and
" not covets to meet with such
" experiments by the way, as
" conduce either to gain or os-
" tentation, may prove no unfit
" porter, to bear his new addi-
" tion of divine munificence*."

In the mean time we have to complain,

* Bacon's Wisdom of the Ancients, sub titul. Prometheus.

complain, that with every attempt towards the formation of a system, new applications of words are introduced, which, though desirable in the art of poetry, are very inconvenient in pathological books, especially when this is done to give an air of novelty to old theories and observations. For between the ancient language, which practitioners cannot entirely reject, and the new dialect, which they cannot wholly adopt, the style of medical books is reduced to a kind of jargon, that the author himself may possibly understand, but which his readers find it very difficult

difficult to unriddle. Hence results a neglect of medical literature, and hence the pernicious habit of regarding as new, whatever has not appeared in the publications of the last half-century.

To those who indulge a hope that a new æra is opening in medicine, that the springs of living Nature are discovered, and that their direction will henceforth be placed in the hands of the chemical physician, these remarks may appear obsolete and discouraging. But from my experience of the effects of pneumatic medicine, I am inclined to

to believe, that its real importance will not be quickly ascertained. It may form a valuable addition to the Materia Medica, but I do not expect from it a renovation of the science of medicine itself.

Whatever may be the opinion formed of my conclusions, I hope the following collection will be found accurate in point of facts. In the practice of medicine, as in all other occurrences, we derive instruction, not less from disappointment than from success. It is, indeed, painful to hear of plans disconcerted, and opinions contradict-

ed

ed by experience, and to toil through a course of observations, divested of brilliant events, and magnificent expectations. But I have endeavoured to convey, faithfully, the impression which I have received from a great number of cases. Whether the result be consonant to some prevailing notions, I shall not decide: it is enough for me that I know it to be true. *Non enim me cuiquam mancipavi, nullius nomen fero: multum magnorum virorum judicio credo, aliquid et meo vindico.* Senec. Epist. 45.

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CONVERSION

OF

DISEASES.

MEDICAL HISTORIES

AND

REFLECTIONS.

OF THE CONVERSION OF DISEASES.

Emovit veterem mirè novus.

HOR. SATIR. l. 3. sat. 3.

1. A disease is said to be converted, when new symptoms arise in its progress, which require a different designation, and which either put a period to the original disorder, or combining with it, alter the physician's views respecting the prognostics, or the method of cure. Many instances of this kind are familiar, as the conversion of intermittents into continued fevers, or obstructions of the viscera; of hæmoptöe into phthisis, of jaun-

dice into dropsy, and the like. Others are more unusual, and unexpected, and deserve to be noticed, because they occasion much perplexity when they occur in practice, especially as this subject has been almost totally overlooked by medical writers.

2. We owe the first observations on the subject of Conversion, to HIPPOCRATES, and his annotators. HOFFMAN has scarcely touched on it, in his short dissertation, *de Morborum transmutatione*. BAGLIVI, though very desirous that it should be treated at length, and though liberal in promises of assistance, confines his recital of facts in a great measure to those of HIPPOCRATES. The only express treatise that I know on this subject, is the QUÆ EX QUIBUS of RODERICUS A CASTRO; a quaint title, which the author took from one of the aphorisms, and which, he says, ought to have been, *Quæ ex Quibus, in quos*. This is a book better conceived than executed, for to the usual error of that time, the making unprofitable commentaries on the

Prorrhetica,

Prorrhetica, this author has added that of considering many common symptoms of diseases as cases of conversion. It is not destitute, however, of useful observations, and we can only wish, that of these the author had been somewhat more liberal.

3. This subject was formerly arranged under two divisions; when the original disease subsisted after the accession of the second, it was termed a case of *Epigenesis*, or *propagation;* when the second disease put a period to the first, it was called an instance of *Metaptosis*, *Metastasis*, or *translation*. With so loose a distinction, which excludes many cases of conversion, it cannot be wondered, that neither DURET, in his notes on the aphorisms, nor Dr. DE CASTRO, acquired an accurate knowledge of this matter. For the chief difference between the *Metaptosis* and *Epigenesis* is, that the relation of the successive morbid appearances, and their dependance upon each other, cannot be so clearly perceived, in one case as in the other. It would

would have been more useful, to have distinguished conversions by their influence on the event of the disease, as some are dangerous, and generally fatal; others, while they terminate the original disorder, conduce to a more speedy restoration of health. Thus, when a continued fever supervenes to pneumonic inflammation, the patient is in great danger; it is *gravi malo grave malum accedere;* when a diarrhæa supervenes to continued fever, in certain stages, it terminates the fever earlier than the regular course of the disease would have done.

All cases of conversion may, perhaps, be conveniently referred to the following heads. I. The supervening disease may be produced by the remote causes of the original disorder; in this case, the action of those causes, after producing its first effect, is prolonged so as to excite a new train of symptoms. II. The supervening disease may arise from the excess, or combination of the symptoms of the original complaint. III. The state of the

habit,

habit, produced by the first disease, may give rise to a new disorder. IV. Conversions may happen, from the imprudent suppression of habitual diseases. Anomalous cases may occur from the coincidence of independent diseases, or from the mixture of two or more of these sources of conversion.

I. The application of certain remote causes may be sufficiently powerful, to produce a fresh disease, after the first has been brought on by their action. It is common to find pneumonic inflammation supervene to typhus, by a continuance of the application of cold or dampness, which operated as a remote cause of the fever. On the contrary, from the tendency of the system to inflammation, or from the manner in which cold has been applied, the pneumonic symptoms precede the fever in some cases, and even run their course, before the fever assumes a regular form. I have seen a case of peripneumonia notha end in typhus, and the typhus in mania. In a fatal case of the conversion of pleurisy into

to typhus, the left lobe of the lungs was destroyed by suppuration *.

In a peripneumony, symptoms of phrenitis supervened on the fifth day, and the patient died on the seventh. The left lobe of the lungs was found suppurated; the vessels of the brain were distended with blood, and the turns of the brain were filled with a bloody, serous effusion †. I have seen a general rheumatic affection, accompanied with swellings and inflammation in the larger joints, converted into a typhus in the first week; and on the contrary, I have more than once found a lingering typhus terminate in rheumatism, but this last case does not come under the present division.

I believe the conversion of the mild synochus, or typhus, to inflammation of the peritoneum, or villous coat of the intestines, may be

* Lieutaud. Hist. Anat. Med. t. 1. p. 533. ob. 378.

† Ib. p. 472. obs. 137.

be referred in many cases to the action of the remote causes of fever. This conversion certainly terminates the original fever; and the diarrhæa, which is often a principal symptom of the inflammation, sometimes accedes immediately after the feverish attack *. I have seen this conversion take place, and the inflammatory symptoms have run very high, when the patient was covered with petechiæ.

When the villous coat of the intestines is inflamed, obstinate vomiting is commonly a symptom, besides the distension and pain of the abdomen †.

The presence of irritating matters in the alimentary canal sometimes produces singular conversions, in the beginning of fevers. A patient, at the first attack of a rheumatic fever, was affected with epileptic fits, to which he had never been formerly subject. Suspecting that they were occasioned by the stimulus

* Lieutaud. lib. 1. obs. 336.

† Ib. lib. 1. obs. 334, 338.

stimulus of accumulated bile, I ordered a vomit, which brought off a large quantity of green bile, and relieved him entirely from the convulsions. In the course of the fever, the convulsions returned slightly, and were again removed by some doses of calomel, which always produced green stools. This kind of conversion is noticed, in Lommius's *Observationes Medicinales*.

I have seen cholera converted to typhus, and as might be expected, a long and dangerous fever produced. There was an uncommon appearance of stupor, at the first attack of cholera, which continued, and increased after the symptoms of that disease were abated, but the brown list on the tongue did not appear till several days afterwards. Dysentery and diarrhæa are often converted to continued fever; but diarrhæa may be considered almost as a symptom of the feverish disposition, and as the forerunner of typhus.

Hysteria

Hysteria is not unfrequently converted into epilepsy and insanity, by the continued action of its remote causes. I have seen the discriminating symptoms of both diseases so much intermixed in the paroxysms, that it was impossible to determine which of them predominated. In one case of this sort, a conversion into mania took place, but the change was perhaps decided by the violence of the passions; in another instance, after a long struggle, hysteria prevailed. When somnambulism has attended the first appearance of such mixed diseases, I have known symptoms of oppression of the brain come on, and the patients have died lethargic.

When epilepsy has supervened to anasarca, and proved fatal, water, as might be expected, has been found on the surface, and in the lateral ventricles of the brain; the *plexus choroides* was likewise full of hydatids *.

In

* Lieutaud. Hist. Anat. Med. t. 2. p. 185. obs. 167.

In a child, two years of age, I have seen a paralysis of the right side converted to hydrocephalus; the sutures of the cranium separated *. Here, as in some other instances, the original disease was constituted, by the appearance of symptoms unusual in the first stages of hydrocephalus, although there was a perfect unity of cause. Probably, the paralytic form resulted from the superior degree of compression, which the brain must have suffered before the opening of the sutures.

I remember a case, in which the progress of paralysis in one arm and one leg, was evidently connected with the increase of scrophulous swellings on the upper part of each of those limbs. Eight months after the appearance of the paralytic symptoms, the patient complained of severe head-ach, vision became indistinct, and at length was entirely lost. Epileptic fits then came on, and he died comatose. When the head was opened,

* Med. Hist. and Reflections, p. 102.

ed, the ventricles of the brain were found full of water, and several tumors, which, in the prevailing medical language, might be called scrophulous, were observed in different parts of the brain. In this instance, the conversion from a slight scrophulous affection to palsy, epilepsy, and coma, was in reality the regular progress of the disease, uniform in its cause, but too obscurely indicated to be originally considered as one affection, diversified in its symptoms. It is not impossible, that scrophulous ophthalmia may be sometimes supported by similar, but less important læsions of the brain.

Cases of hysterical conversions, which belong to this head, are very common sources of error to young practitioners, and sometimes deceive even the most experienced. Whoever would present us with a good book on the *fallacy of symptoms*, which is greatly wanted, must be completely master of this unaccountable disease.

We

We are ignorant by what laws the body possesses a power of representing the most hazardous disorders, without incurring danger; of counterfeiting the greatest derangement in the circulating system, without materially altering its movements; of producing madness, conscious of its extravagancies, and of increasing the acuteness of sensation, by oppressing the common sensorium. In hysterical affections, all these appearances are excited, which are incompatible with the reasonings of every system-maker, who has yet endeavoured to explain the inexplicable. Nature, as if in ridicule of the attempts to unmask her, has in this class of diseases, reconciled contradictions, and realized improbabilities, with a mysterious versatility, which inspires the true philosopher with diffidence, and reduces the systematic to despair.

I have met with several cases of hysterical hæmoptöe, in which the quantity of blood evacuated was very considerable; six or eight ounces were sometimes spit up daily, for a fort-

a fortnight or three weeks successively. Most of the usual symptoms attended, which denote danger in this complaint, when it arises from other causes, but the equal, moderate state of the pulse, and the appearance of some degree of the globus hystericus, seemed to determine the nature of the complaint; a conversion, accordingly, soon took place to the ordinary hysteric paroxysm, and no bad consequence followed the hæmorrhage from the lungs.

When the hysteric disposition is set in motion, it is not uncommon to find many of the different viscera attacked by it in turns, and the diseases peculiar to each counterfeited with much exactness. I have seen symptoms of paralysis, jaundice, palpitation, and nephritis, succeed each other rapidly in the same patient, while some of the characteristic marks of hysteria have been discernible, and where the unity of the disease was proved, by the disappearance of all menacing affections, on the approach of regular fits. In one case, the bowels were attacked, and the

symptoms

symptoms of enteritis were so precisely imitated, as to give much alarm for the patient's safety. I suspected the real nature of the disease, from observing that the pulse was soft and full, that the evacuations were natural, and that her spirits were agitated, even to involuntary emotions, by slight causes. This case terminated successfully, on the accession of clear hysteric symptoms.

In all similar instances, the supervening hysterical paroxysm puts a favourable termination to the irregular appearances.

Several years ago, I attended an elderly lady, for a complaint which seemed to vibrate between apoplexy and palsy; after lying for several weeks in a state which afforded little hope of amendment, she was affected with involuntary sobbing and weeping; the complaints in her head and limbs were converted into hysterical convulsions, and she recovered completely.

It

It is very common to meet with syncopé, or palpitations of the heart and great vessels, accompanied with a soporific depression, or extreme dejection of strength and spirits, and converted, after deep sighing or discharge of tears, into the hysterical paroxysm. In these cases, the pulse is sometimes full and regular, during the most alarming appearance of sinking; and sometimes variable to such a degree, as to exclude all conjecture, excepting that of an hysteric origin.

To this head also belong the facts of vicarious hæmorrhage: these have been so well explained by different authors, that I shall only mention one or two remarkable occurrences of this kind, which I have met with. A shoemaker, about forty years of age, was suddenly seized with a continued bleeding from the urethra, without effort, or any desire to pass urine. When I saw him, an hour or two after the seizure, the blood flowed slowly, but without intermission. Upon pressing the lips of the urethra together for a few

a few minutes, he became uneasy, and when the blood was suffered to pass again, a small coagulum came off. He said, that clots of blood were discharged sometimes, even when he had not attempted to restrain the hæmorrhage. The only cause to which this singular phænomenon could be referred, was that he had been accustomed, during several years, to be let blood once in six months, and that he had omitted this evacuation, for three years preceding the hæmorrhage I have described. After continuing upwards of twelve hours, during which the blood soaked through the bed-clothes, and overspread great part of the floor, the hæmorrhage ceased, and the patient recovered.

A young girl, subject to amenorrhæa, was affected, during the absence of the periodical discharge, with ulceration of the navel.

I have known rheumatic pains and leucophlegmatic swellings produced at the same time, by the application of cold; and in some

cases

cases of general dropsy, succeeding exposure to cold, there has been much pain and stiffness of the limbs, at the commencement of the disease. I have even seen anasarca and typhus produced by the same degree of cold, at the same time.

Conversions of the different genera of fever into each other are so common, and so well described by practical writers, that I shall content myself with indicating, that in many cases they belong to this head. Conversions of intermittent to continued fevers, and of synochus to typhus, are those which may be properly comprehended here.

II. The symptoms of an idiopathic disease may, by their violence, assume the appearance, and require the attention due to a new complaint; or affections of particular viscera, which, in their incipient state, are only regarded as symptoms of general indisposition, may, as they gain ground, extinguish the original disease, or be protracted beyond it.

 This

This head comprehends such a variety of cases, that to treat it fully, would be to give the history of all symptomatic diseases. I shall therefore confine myself, to cases which have come more immediately under my own observation.

I have known the catarrhal affection, which so often accompanies synochus, converted to a harrassing cough, of the most alarming nature, attended with a very great expectoration. When symptoms of pneumonic inflammation supervene to typhus, there is always great reason to apprehend a consumption. In many instances of the phthisis mucosa, which I have seen succeed to typhus, the lungs seemed to have acquired the habit of secreting an unusual quantity of mucus, from encreased irritability; for I have found, that by removing the patients to a drier situation, and purer air, the quantity expectorated has been quickly reduced, from a quart or more, to a few ounces in the day *.

Dr.

* I have also found *digitalis* serviceable, in similar circum-

Dr. Percival informs me, that he has seen an effusion into the cavities of the brain, produced by the violent succussions of coughing, in a confirmed pulmonary consumption, which effusion terminated fatally, with a previous suppression, more than a week before death, of all the pulmonic symptoms.

I have seen the hæmorrhagic effort, which is not an unfrequent symptom of typhus, when directed to the bowels, extinguish the fever, and become an alarming disease, by its duration, and by the quantity of pure blood passed with every stool.

The dyspnœa which is so often converted into

circumstances, whether by diminishing general irritability, or by lessening the determination to the lungs, in consequence of its diuretic power, I cannot decide. But I have repeatedly stopped the progress of incipient consumptions, by administering this remedy, when the patient was too much weakened by preceding disease, to bear the usual methods of lessening the impetus of the circulating system. The florid consumption seldom appears among the natives of Manchester.

into general dropsy, frequently puts on every appearance of asthma, before the swellings commence. In one case of this kind, the difficulty of breathing, and pain in the breast were so urgent, that I found repeated bleeding necessary to relieve the patient*. In this case, respiration was stridulous, and the voice was scarcely articulate before bleeding.

The dyspnœa and dry cough, on the contrary, which are converted into hydrothorax, are commonly accompanied with much extenuation and general debility, and are chiefly to be traced to their real cause, by the torpor of the left arm, or by shooting pains, extending to the fingers of either, or both arms.

It may not be irregular to mention in this place, that the pain in the lower part of the abdomen, with which I have generally seen dilatations of the heart accompanied, is sometimes so urgent, that the patient hardly makes any

* See Hist. 49, of the Remedies of Dropsy.

any other complaint at the commencement of the disease. Lieutaud has mentioned severe pain in the region of the stomach, as a symptom, in two cases of dropsy of the pericardium, with dilated heart. In one, at present under my care, the pain was originally in the hypogastric region, but has now fixed in the region of the stomach.

In a case of acute rheumatism, I have seen the swellings of the fore arm suppurate in different places, so as to produce a succession of abscesses, which were all opened with the knife, and healed readily. In opening one abscess, the nerves, supplying two fingers, were divided; the fingers were paralytic for some weeks after the incision was healed, but their sensation and motion were gradually restored, and the patient entirely recovered the use of them.

It is one of the most perplexing occurrences in medicine, when the supervening disease is produced by a symptom of some latent

latent complaint; when, for example, phthisical symptoms arise in a scrophulous or gouty patient, who exhibits, at first, no other appearance of those two diseases. I remember an instance, in which all the characters of confirmed phthisis pulmonalis were present, that terminated in recovery, upon the patient's coughing up some solid particles, which upon examination proved to be chalkstones. Some other cases, exactly similar, have been mentioned to me in conversation, by different practitioners. Several instances, which are commonly named misplaced gout, are in reality conversions, and of a kind very apt to mislead the judgment. For the following very remarkable case, I am indebted to Dr. Percival.

" A gentleman of rank in this county, was " supposed to be in an advanced state, of what " is called a galloping consumption, having " an incessant cough, an expectoration ap- " parently purulent, continued heats, and " night sweats. Yet his cure was accomplished

"plished by giving wine-whey copiously, and "by administering doses of hartshorn and "spermaceti. A gentle fit of the gout was "produced, by this cordial regimen. The "fever, cough, and spitting, progressively "abated, and the health of the patient was "soon perfectly re-established."

I have seen an effort of this kind spontaneously made, at the close of a phthisical complaint, in a very exhausted habit; but though one great toe inflamed considerably, the patient was too completely reduced to derive much benefit from it.

There is a strong resemblance between hysteria and gout, in the power of counterfeiting different diseases, but with this material distinction, that the hysterical representations are commonly void of danger, while those produced by gout are often more dangerous, than the simple disorders which they imitate. The hysterical hæmoptöe, for example, is seldom productive of bad consequences,

quences, but the arthritic apoplexy, pneumonia, and cardialgia, are much more alarming, and run their course quicker, than similar complaints originating from other causes. But these diseases agree in this respect, that the accession of the regular paroxysm puts a a favourable period, to the irregular symptoms of each.

Irregular intermittents have occasioned palpitations of the heart, at their first accession, so violent, as to give supicion of an organic læsion in that viscus. One mark, by which this case may be distinguished is, that before the palpitation becomes troublesome, or the stroke of the heart so loud as to be heard by another person, the patient always feels a strong sensation of closing in the region of the heart. A farther distinction is, that this sort of palpitation always attacks in paroxysms, though the patient is never free from irregularity in the motions of the heart; and the accession of the paroxysm generally happens in the evening, or early part of the night.

night. In cases of this kind, I have known the convulsion of the heart attended with palpitations in the subclavian and carotid arteries, and sometimes with distressing palpitations of the iliac and femoral arteries, tingling pains shooting to the points of the fingers, and occasional swelling of the face. But the intermittent type still appearing, and the apex of the heart striking in the usual place, I have removed the complaint entirely, by bark, sea-bathing, and exercise on horseback. Mr. Pomme, in his curious treatise *des Affections Vaporeuses*, says, the hysteric epilepsy may be known, by its occurring at the menstrual periods. I have found it a permanent disease in several instances, and its nature was only to be detected, by the patient's retaining some degree of recollection during the fit, or by the concomitancy of globus hystericus.

Gout is sometimes converted into rheumatism, when the arthritic tendency to the extremities takes place in very irritable habits.

its. I have known the large joints affected with tumor and inflammation, when, from the sympathy of the stomach with the pained parts, and from the symptoms preceding the seizure of the joints, there could be no doubt of the gouty nature of the disease.

Dyspeptic symptoms are often produced, in the incipient state of pulmonary consumption, and subsist for a considerable time, before any affection of the lungs is indicated, insomuch that a conversion appears to happen, of dyspepsia to phthisis. I believe the affection of the stomach, in such cases, is sympathetic, and affords one of the most intricate examples of masked disease. The origin of this fallacious dyspepsia may be suspected, when there appears more languor than real debility, connected with indigestion, and frequent vomiting of small quantities of pure bile; when the patient is often liable to torpid oppression, chiefly when the stomach is empty, and when, upon the return of his vivacity, his faculties appear rapidly and considerably

siderably improved. There is also great impatience of scenes to which he has been accustomed, and a kind of appetite for travelling. In the mean time, the body wastes, and a short cough, which was almost unheeded at first, becomes more and more troublesome. The expectoration, which appears to consist of nothing but mucus, and from its facility, resembles the spitting familiar to hypochondriacs, encreases gradually in quantity. In this state, I have found the patient liable to violent circumscribed pain in the bowels, a little higher, but more forward than the spine of the ileon.

Another symptom of dyspepsia, frequently deceives even experienced practitioners; this is, a pain in the right side, in the region of the liver, commonly fixed, but sometimes shooting back towards the spine. With this, there is often a slight, but permanent yellow suffusion of the eyes and countenance, great anxiety, frequent distention of the abdomen, and before the returns or exacerba-

tions

tions of pain, the urine is of a bright green colour. The tongue and lips grow dry, and are divided by fissures; the former is covered by a rough bilious crust, and the legs swell slightly in the evening. The pain in the side is sometimes very severe, and is then attended with pain on the top of the right shoulder. These symptoms altogether, give such strong suspicion of an hepatic affection, that it is not to be wondered, if we find cases of this kind too readily treated as such. From careful observation, however, particularly in my own case, when I suffered this complaint several years ago, I have no doubt, that all these symptoms may be produced by acidity in the stomach, and a spasmodic affection of the duodenum, without any organic læsion of the liver. The distinction is, that the pain may be felt to change its place a little, on the expulsion of wind. The pulse likewise is soft, though very irregular. The secretion of mucus from the schneiderian membrane is interrupted, and sometimes nearly ceases, though the patient feels a fre-

quent

quent inclination to discharge it. He is generally, but not obstinately, costive, and subject to torpor, and nervous oppression. A slight inflammation of the fauces also attends this disorder, returning once in eight or ten days.

The method which I have found most successful in this disorder, is to give repeated small doses of the tinctura alöetica, so as to keep the body rather loose, to use daily exercise on horseback, and to reside in the country, or at least, to avoid sleeping in a town.

Dr. Hoffman has treated this subject with great accuracy, in his little tract, *De Duodeno, multorum malorum causa.*

I have found this pain connected, and apparently convertible with nephritic sympoms; in this case, which was obscure, it continued for several years, without threatening the patent's life, yet there was no bili-

ous

ous evacuation, either by urine or stool, and no discharge of gall-stones. I believe that in such cases, a laxative diet, consisting of vegetable food, and of butter-milk largely used, may prove more efficacious than any course of medicine.

The affection of the head, in mixed cases of gout and hysteria, sometimes rises to a degree of paralysis; speech is interrupted, and the power of voluntary motion on one side greatly diminished. But the origin of this kind of palsy is, in general, to be traced, by the presence of globus hystericus, or by involuntary sobbing and weeping having preceded it, at no great distance. In many cases, the gouty irritation, in painful, irregular fits, is converted to hysterical affections, but I have not observed that the gouty paroxysm was shortened, or the pains much relieved, by the hysterical accession.

The prognostics, in conversions of this second class, must evidently vary, according

to

to the seat and degree of the supervening disease, and its favourable or unfavourable action upon the original disorder.

III. The original disease, if acute, when it has run its usual course, may leave the habit in a state favourable to the production of another disease; or if the original be a chronic disorder, such a state of the habit may take place during its continuance, and the accessory disease may be simply super-added, or it may vary the form, or affect the duration of the former.

Continued fevers are converted into different diseases, the production of which admits one general explanation. During the encreased action of the circulating system, if any part of the body be originally weak, or have been rendered infirm and irritable by preceding disease, congestion and its consequences may be expected there. It is therefore easy to conceive, why one patient should suffer a paralytic affection, another phthisis, or

or a third nephritis, in consequence of tedious cases of typhus. The glandular suppurations, consequent on fevers, seem to depend on the same principle, for although they are represented as critical, by the older medical writers, I have seen a striking proof of the contrary. A middle-aged man had been ill of typhus nearly three weeks, when a parotideal abscess begun to form on one side of the face. According to the common opinion, his recovery was to be expected; yet though the abscess burst, and discharged freely, the patient died. The remedies directed against the general symptoms of fever, ought not, therefore, to be suspended on the faith of such appearances, notwithstanding the confidence which authors would teach us to repose in them.

I have seen paralysis supervene to typhus, and prove mortal before the fever had finished its course *, when it appeared after death, that extensive suppuration had taken place

* Medical Hist. and Reflect. p. 133.

place in the brain. But, in general, the paralytic symptoms do not appear till the fever has ceased; we have then nothing to apprehend for the patient's life, but we may expect an obstinate disease. I have not often found insanity supervene to typhus, though some alienation of mind is not very uncommon, after long delirium. When maniacal symptoms take place under such circumstances, there is reason to fear that recovery will prove difficult and tedious. I have been startled by Sydenham's direction of copious bleeding in such cases, but I have met with a proof, that repeated bleeding may become necessary, in congestions of the brain, immediately after the expiration of a typhus. *J. Coverley*, a young man, was attacked by a fever, which had every character of an incipient typhus; there were, particularly, great tremors, violent pain in the head, weak pulse, and tendency to delirium. All these symptoms were removed, in a short time, by the use of bark and wine. He then had a relapse, and again recovered. He continued

feeble and emaciated, and very soon after the retreat of the fever, was seized with excruciating, constant head-ach, and inflammation of the left eye. As the fever had reduced him so much, I hoped to subdue these symptoms by cathartics, opiates, topical bleeding, and blisters. After evacuating his bowels, which were so torpid, that he required large doses of calomel, I gave him Dover's powder in full doses. No relief being obtained by these methods, and finding his pulse oppressed, I directed him to lose ten ounces of blood. Great relief immediately followed, and his pulse become softer and fuller.

The exanthemata are frequently converted into diseases, which become both chronic and dangerous. The small-pox often produce severe coughs, diarrhæa, and ophthalmia. In some rare instances, tumors of the joints supervene, which suppurate, and destroy the patient *. The pneumonic inflammation, attending the measles, is too often converted into

* Hoffman de Variol. There is a case of this sort very well described in the Miscellanea Curiosa.

into phthisis pulmonalis. Glandular swellings, and general dropsy, frequently succeed the scarlatina anginosa.

In particular seasons, conversions to dropsy succeed most cases of typhus. It does not appear to me, that this conversion is owing to any remarkable degree of debility: possibly it may proceed from congestion in the system of the vena portarum. It happens most frequently among children. In one case of this kind, epilepsy supervened to the dropsy, and destroyed the patient. In another, the patient recovered by the application of blisters, and the internal use of stimulants, after having undergone several epileptic fits, and appearing comatose during their intervals.

There is a curious case in Dr. Percival's Essays, Medical and Experimental *, of a woman, in whom a conversion of fever took place, first into palsy, afterwards into epilepsy, and then into amaurosis. In that instance, the patient

* Vol. 1. p. 148.

patient recovered; perhaps, because some hysteric commotion had exasperated the alarming symptoms. In men, epileptic fits, occurring when a fever has subsisted for some days, have proved fatal, as far as I have observed. Indeed when it is considered, how often suppuration of the brain has been discovered, in the small number of dissections of persons dead of fever, such conversions must always excite the greatest apprehensions for the fate of the patient.

Such is the tendency to congestion, in typhus, that patients often discharge considerable quantities of blood, by the mouth, nose, bladder, or anus, without much injury. I have known a person, in the second week of a confirmed typhus, when there was great prostration of strength, delirium, and a very feeble pulse, discharge near a pint of pure blood by stool, in the course of one night, with evident relief. The common theory, which supposes a dissolved state of the blood, in what are called *putrid* disorders, could not

have

have place in this instance, for none of the usual appearances of putrescency were present. These facts seem to shew, that when local inflammation attends typhus, *topical* bleeding, at least, may be very freely used.

Fevers often terminate in hysterical disorders, especially in women; men too, are sometimes hysterically inclined, upon recovering from typhus, for they experience a capricious disposition to laugh or cry, and a degree of the globus hystericus. In women, the affection is characterized by sickness and porraceous vomiting, or by convulsions*.

Nephritis is also a common conversion of continued fever: it seldom supervenes with considerable violence, excepting in persons who have formerly undergone it; but when it has been familiar to the patient, I have commonly seen a very large quantity of gravel passed, with extraordinary pain, in the state of

* Medical Hist. and Reflect. p. 119.

of conversion. The accession of nephritis always extinguishes the fever.

In young men, a swelling and inflammation of one testicle sometimes takes place, and becomes the principal object of attention, towards the close of continued fevers, without affecting the progress of the original disease. I believe suppuration seldom happens, in this conversion, but the affected testicle is sometimes wasted. During one season, I have observed a disposition in most fevers to terminate in inflammation of the eye-lids, nose, and lips, proceeding from one part to another progressively, like erysipelas, though truly of the active kind of inflammation. The eye-lids, and point of the nose suppurated, in some cases.

In 1790, a remarkable conversion happened, in many instances: typhus, of the most malignant kind, terminated in a gangrenous affection of the pudenda, in very young

young girls *. This conversion proved fatal, in a great majority of cases, notwithstanding the liberal exhibition of wine, bark, and opium.

I have seen typhus converted to an obstinate head-ach, which was cured by blistering behind the ears.

A. B. a middle-aged woman, was sent into our hospital as a lunatic. I found her in a state of insensibility, with a thready, low pulse, her cheeks flushed with a circumscribed red, and her tongue foul. Cordials were administered, but she could not be rouzed by any method, and she died, a few days after her admission.

Upon opening the head, the vessels on the surface of the brain appeared very turgid; the lateral ventricles were full of water. In different parts of the medullary substance of both hemispheres, tumors were found, of a middling

* Medical Hist. and Reflect. p. 133.

dling consistence, some of the size of large peas, others about the bigness of a nut; when divided, marks of suppuration were found in their internal substance. One of these tumors nearly filled up the anterior part of the third ventricle; another, the largest of all, was enchased in the substance of the right segment of the pons varolii, which it occupied almost completely.

From the most accurate enquiry, I could not discover that this woman had shewed any remarkable alienation of mind, till within a few days before I saw her. Her symptoms were those of a patient dying of typhus, but there was nothing sufficient to give suspicion of the real cause of death. She had complained of a head-ach for several months, without interrupting her duty as a servant.

Chronic diarrhæa often precedes symptoms of ulceration in the bladder. This may perhaps be reckoned a case of sympathy, but the appearance of conversion is as striking,

as

as in any other instance. A discharge of flatus from the urethra, however, attends this kind of diarrhæa, and should give intimation of the latent disease.

In like manner, chronic diarrhæa and dropsy are familiarly converted to scirrhus of the liver, suppuration of the kidneys, and other organic læsions of the abdominal viscera, which are largely detailed in practical books.

Jaundice is said, by Baglivi, to be converted to tympanites *: I have seen tympanites converted to diarrhæa and ischuria. *C. W.* a man about fifty years of age, had been affected with a soft, inelastic swelling of the abdomen, a year and half before he applied to me. When I saw him, it was evidently a confirmed case of tympanites. He was at the same time asthmatic. When he swallowed a mouthful of any spirituous liquor, the swelling of the abdomen began to subside, and

* Prax. Medic. p. 375.

and in the course of five or ten minutes entirely disappeared, without any sensible discharge of flatus: in three or four hours, it rose again to its former height. A vermicular motion of the intestines could be plainly felt, by applying the hand to the abdomen, while the tumor subsided. The distention was relieved by a course of steel and asa-fœtida, with occasional opiates. About a year after he came under my care, he was frequently troubled with a severe diarrhæa, which was soon converted into a painful discharge of bloody urine, and sometimes even a total suppression of that evacuation. From these complaints he was relieved, by the free use of camphor and opium in conjunction, but they returned frequently during the ensuing half-year, and at last confined him to his bed. The ultimate conversion now appeared: his right leg and thigh swelled, and inflamed with great pain, and gangrene and death soon followed.

At different periods of his complaints, the size

size of the abdomen had varied greatly. It was sometimes little more than natural, but no connection could be traced between this circumstance, and the conversions of his disorder. The singular phænomenon of the sudden decrease of the swelling, could be produced, almost to the last.

On opening the body, I was surprized to see no omentum, for the subject was very fat; on diligent search, it was found that the omentum was pushed up into a sac formed by the diaphragm, and actually lay within the thorax, on the right side; as this sac, which was large enough to contain the hand, had a very small neck, the omentum was not brought down again without force. The caput cæcum, and transverse arch of the colon were in a state of very great distention; the other parts of the intestinal canal appeared sound. The kidneys were not much enlarged, but entirely diseased: their external surface was covered with watery vesicles, under which we found deep, circular ulcers,

which

which could have contained a large pea. Internally, the kidneys were inflamed and ulcerated, in their whole substance. The liver was sound, but the gall-bladder was full of gall-stones, which, Baglivi remarks, he always found very numerous, in persons dead of tympanites.

This dissection throws no light on the singular fact, of the occasional removal of the distention. The ischuria was perfectly accounted for; probably the diarrhæa was a sympathetic affection, produced by the state of the kidneys. The hernia of the diaphragm, here detected, has not, I believe, been described before.

Dyspeptic complaints, of long standing, are often converted to general dropsy, especially when they are accompanied by chronic pain of the stomach. Ascites is frequently converted to chronic inflammation of the bowels and diarrhæa, which generally prove fatal*.

Maniacal

* Med. Hist. and Reflect. p. 97 and seq.

Maniacal complaints, after continuing for several years, often terminate fatally with epileptic fits, as Dr. Mead has observed. In opening several patients, who have died in this manner, I have found the lateral ventricles of the brain turgid with water, and such a general fulness of the blood-vessels of the brain, that they appeared as if artificially injected. It was difficult to determine, whether there was any unusual hardness of the brain in those cases, but all the parts appeared uncommonly distinct and sharp.

Dr. Mead has noticed two remarkable conversions, one of which extinguished, and the other retarded, a dangerous complaint. A young lady, in the last stage of a dropsy, was seized with a fit of insanity, during which she bore the action of powerful hydragogues, which removed at once her mental and bodily disease. Another lady, affected with all the symptoms of confirmed consumption, was suddenly impressed with religious melancholy, which removed every phthisical symptom

tom

tom for three months, but the original disease then returned, and proved fatal *.

I have seen a patient, who had long been in a brutal state of insanity, seized with a pleurisy, and have found him more clear and consistent in his answers than usual. But I have known another maniacal patient, not so completely deranged, undergo a very painful operation, without any immediate effect upon the mind.

In one maniacal case, which succeeded an ill-treated typhus, the patient received no relief from medicines, till a broad, yellow, scurfy eruption appeared about the crown of his head, which was bald. Successive crops of these eruptions delivered him completely from all remains of his mental disorder.

Typhus, and the cynanche maligna are sometimes reciprocally converted, when both are epidemical. The cynanche has been converted

* Mead de Insania.

verted to general dropsy, even before the ulcerations in the fauces disappeared.

IV. Conversions may arise, when a disease, regular in its usual course, or long familar to the habit, is violently terminated by improper methods, or suddenly extinguished by accidental citcumstances.

I have noticed elsewhere *, a remarkable case, in which epileptic fits were produced by the retrocession of the itch, in consequence of some external application. In that case, the epilepsy resisted all the usual methods, and was only cured by reproducing the itch.

Instances of the production of melancholy and madness, by the suppression of eruptions, or the healing of old ulcers, and habitual drains, are common in practical writers. The diseases originating from the suppression of the menstrual and hæmorrhoidal discharges, are also well explained in different books. Dr. Hoffman's

* Med. Hist. and Reflec. p. 183, 184.

Hoffman's treatise *de Morborum Transmutatione*, relates almost entirely to this class of disorders.

I am inclined to consider the puerperal mania, as a case of conversion. During gestation, and after delivery, when the milk begins to flow, the balance of the circulation is so greatly disturbed, as to be liable to much disorder, from the application of any exciting cause. If, therefore, cold affecting the head, violent noises, want of sleep, or uneasy thoughts, distress a puerperal patient, before the determination of blood to the breasts is regularly made, the impetus may be readily converted to the head, and produce either hysteria, or insanity, according to its force, and the nature of the occasional cause.

In the following case, which fell lately under my observation, the most alarming conversions happened, in consequence of the moveable inequality of circulation. *J. G.* a young man, of a full habit, after a fall on his

his right side, was affected with a cough, and occasional spitting of blood. When he came under my care, he had every appearance of phthisis, except emaciation. He sometimes passed small quantities of blood, both by stool and urine. After three or four months, the phthisical symptoms abated considerably, and he began to complain of a severe, fixed head-ach; in a short time, he became paralytic on the left side. From these symptoms he was gradually freed, by repeated bleedings and blisters. A violent pain then attacked him under the left breast, without renewing his cough, which was followed by an irregular train of complaints, that did not point to any particular disease. At length, he began to swell, round the lower part of the trunk of the body, and there was reason to believe, that a large quantity of matter was forming in the cellular membrane. Not long after, a disease in the vertebræ of the back began to shew itself. His lower limbs were now become entirely paralytic. After languishing in this state for a considerable time, he was seized with a purging of pure pus,

which continued for two days, and completely reduced the swelling, but left him so weak, that his death was hourly expected.—I had not an opportunity of knowing the event of this case.

Tedious dyspeptic cases are often converted to cutaneous eruptions, in distinct pimples, of a fiery red colour; such eruptions extinguish the complaint in the stomach.

The hernia humorrhalis, occasioned by a premature suppression of gonorrhæa, may be properly reckoned a case of conversion. I have been informed, that this affection of the testicle has been known to baffle every means of relief, and that the practitioner found it necessary to inoculate the patient for a fresh gonorrhæa. The return of the running, and ardor urinæ, it was said, entirely removed the disease of the testicle.

Three remarkable cases of conversion, in consequence of suppressing mercurial salivations, are mentioned by Dr. Silvester, in the Medical

Medical Observations and Inquiries*. In one, violent pains in the joints, in another, a fixed head-ach, in a third, a vomiting of every thing swallowed, during three months, took place. I have known hermoptöe and consumption follow exposure to cold, when the body was charged with mercury. The effects of mercury, in large doses, have been little known, comparatively, since the dangerous practice prevailed, of trusting the cure of lues to slight courses of that medicine. I have seen tremors, so universal, that they seemed to affect every individual muscular fibre in the body, supervene on its large, and long-continued use, when siphylis had been rooted in the habit, by a too sparing previous exhibition. In another case, I have known mercury so imprudently given, and with so little attention to the progress of the disease, that when the mercurial ulceration took place in the tonsils, it was supposed that the patient was relapsing, and a fresh load of mercury was thrown in, with the effect of producing

* Vol. 3. p, 241.

producing racking pains in the bowels, fever, and bloody purging.

The mercurial hectic, which may justly be reckoned a case of conversion, is not only alarming in itself, by ruining the powers of digestion, but in its tendency to produce melancholy, and total derangement of the faculties.

De Castro mentions a conversion from dropsy to epilepsy, of which I have seen no instance, but which is confirmed by a case of Lieutaud's *. The ventricles of the brain are often loaded with water in hydropic patients, at every age. In fatal cases of ischuria, when the patient dies comatose, it is well known that the ventricles of the brain are filled with a fluid, which has the sensible qualities of urine. This is a real conversion to apoplexy.

I shall remark, by the way, that in diabetic patients,

* De Hydrop. Epigen.

patients, the pathological rule respecting the conversions of determination between the skin and the kidneys, does not always hold good. In two cases of diabetes, the patients have complained of profuse sweats, at a time when the discharge of urine was most considerable.

In the cases which I have seen, dyspeptic symptoms have always preceded this disorder, and it has been attended with great emaciation, and every appearance of general debility. Dr. Sydenham seems to have regarded it, as always dependant on such a state *.

The diseases produced by the improper suppression of gout, whether from the imprudent use of tonics, such as the *Portland Powder*, or from too sudden an adoption of low diet, are too well known to require particular consideration here. While gouty symptoms are so directly produced by a certain state of the passions, it is vain to direct our attention to corporeal remedies only; and it happens

* Epidemic Diseases from 1675 to 1680.

pens unfortunately, that an exemption from care and solicitude, the great sources of arthritic complaints, is, in this life, unattainable. Under uneasy circumstances of mind, gout will arise in persons strictly temperate and virtuous, active, free from hereditary pre-disposition, and in every respect qualified to claim an exemption, from this great scourge of anxious refinement, and artificial society.

Anomalous cases of conversion may be multiplied infinitely, not only by the combination of the different circumstances already mentioned, but by the modes of treatment adopted by practitioners. Slight cases of synochus are often converted to typhus, intermittents to continued fevers, and pneumonic inflammation to phthisis, by the improper practice of medical men. On this delicate subject, Dr. Hoffman has written a little essay, entitled, *Medici Morborum Causa*, which may be perused with advantage.

There are few diseases, in which the effects of

of injudicious practice are more apparent, or more distressing, than in rheumatism. I have repeatedly seen the patient's strength worn out, by pushing contrary methods to excess, when the practitioner has shed torrents of blood one day, and has endeavoured to repair the consequent sinking, by pouring in the most mischievous cordials on the next; while the pain, instead of abating, has become more agonizing. I have seen the plan of bleeding and low diet carried on, till the patient became dropsical, without obtaining any relief from pain; in other cases, I have known the pains fixed for life, by an untimely exhibition of bark. I have known extenuation of the whole body, and palsy of the extremities, supervene to a common rheumatic attack, which might have been readily overcome by proper treatment. These conversions are particularly frequent among the poor, in remote parts of the country. In such cases of great emaciation, and loss of voluntary motion, combined with constant pain, nothing answers better than a course of

ling-

ling-liver oil, which has long been a popular remedy in our infirmary. I am inclined to think, that this remedy operates, in a great measure, by encreasing the deposition of fat in the cellular membrane, for I have invariably observed that it is slow in relieving, that patients acquire a considerable degree of corpulence as their recovery proceeds, and that an encrease of plumpness is always evident, before the pains diminish remarkably.

The lives of many hysterical and hypochondriacal patients have been at once shortened and embittered, by the thoughtless encouragement, which some practitioners give to the use of spirituous liquors. I have seen most melancholy instances, in which habits of dram-drinking have been thus acquired, under the sanction of the medical attendant, by persons, not only temperate, but originally delicate in their moral habits. In this manner, hysterical disorders of no great moment, are converted to scirrhus of the liver and dropsy, to apoplexy, palsy, and other fatal diseases.

In

I have known a chlorotic palpitation of the heart treated as a dilatation, though the apex of the heart was found to strike in the usual place; frequent small bleedings and low diet were enjoined, and this method was pursued till anasarca supervened, and the patient's strength was completely exhausted. *Sed Manum de tabula.*

In cases of internal suppuration, the removal of pus from one cavity to another, from the knee-joint, for instance, to the cavity of the peritoneum, is popularly called a metastasis, and described in every treatise of general surgery.

In the Miscellanea Curiosa, a case is related, in which epilepsy was cured by conversion to a quartan*.

Conversions of the different species of inflammation into each other (a neglected subject of great importance) belong, perhaps, to this

* Ann. 1695-6. p. 34.

this head, as there seems little regularity in the process. I have found active inflammation in the tonsils combined with the scarlatina anginosa, in several cases: when ulceration had begun on the surface of the tonsil, after the appearance of the scarlet efflorescence, the body of the tonsil has inflamed and swelled, the ulcerative process has been stopped; genuine inflammation has appeared, and suppuration has followed. The ulcers have sometimes been extinguished by this occurrence; sometimes they proceeded, when the suppuration of the other part of the gland had run its course.

Diseases produced by independent causes, when they coincide in the same patient, although they are not mutually convertible, may yet influence each other in some degree, so that the accession of one may be retarded. Thus, when the contagions of the measles and small-pox have been applied about the same time, to a person predisposed, the disease first communicated has run its course, and then

the second disease has taken place, though at a later period than that in which its contagion usually takes effect. There are other contagious diseases which may subsist together, without affecting each other in any respect. It has never been observed, in armies, that the presence of the venereal disease prevented attacks of dysentery; and it is known that hydrophobia, which so powerfully agitates every fibre of the system, has not produced any alteration in a virulent gonorrhœa, with which an unhappy sufferer was at the same time affected.

A case lately occurred to me, however, in which nodes on the shin-bones, and venereal pains in the heels came on, immediately after a fit of acute rheumatism, in consequence of a pox contracted several months before.

There are some cases in which two diseases subsist together, without any apparent connection, although one of them be really produced by the other; and from a want of facts

facts upon this subject, the relation can only be traced by dissection after death. I shall give a case of this kind, at some length, because the symptoms were of the most delusive kind, and calculated to inspire false notions of the disorder. If it be properly considered, it will be found to convey very important cautions.

S. S. a boy, three years of age, was seized with a fever, then epidemic, on the 10th of Sept. 1794. I saw him three weeks afterwards. With the common febrile symptoms, he had a considerable degree of anasarca, which affected more especially his face, and lower extremities. He had no cough, no difficulty of breathing, nor pain in his breast, and I could not find, from the most careful enquiry, that he had ever made such complaints. There was great paleness over the whole skin. He was torpid, without delirium, or the symptoms of oppression common in typhus. About the eleventh of October, he complained of pain in the lower part of the

the abdomen; on the twelfth, violent palpitations of the heart, and in the arteries on the neck, supervened, and he died on the thirteenth.

Upon opening the body, we found water effused under the dura mater, and the pia mater was distended with water. The blood-vessels of the brain appeared full, but there was no other morbid appearance in the head. In the abdomen, the liver was unusually large, but otherwise sound; the gall-bladder was much distended; the kidneys were enlarged, but not diseased; and there was rather more fluid than usual in the cavity of the peritoneum. In the thorax, there was great disease. The pleura adhered strongly to the ribs, all round, and on the right side was inseparably united to the part covering the lungs. There was an inflammatory exsudation over the whole surface of the pleura. A small quantity of fluid was effused, on the left side. The pericardium was filled with water. The heart was sound, but the left auricle was very

very small, and shrivelled. The right auricle was somewhat larger than usual.

In this case, an active inflammation through the whole extent of the pleura, producing exsudation and adhesions, was not indicated by any symptom, during the continuance of the complaint. The anasarca might be originally produced, by the remote causes of the fever and pneumonic inflammation, but it was apparently encreased, at least, and supported by the obstacles to circulation, which the state of the lungs and pleura presented, particularly after the formation of the adhesions. Both parents assured me, that the anasarca appeared at the same time with the fever. This affords, therefore, a striking example of those insidious cases, in which the principal disease does not produce its proper symptoms, but proceeds under the mask of another disorder, not usually connected with it during its active state. A succession of blisters would be a probable method of relieving such affections, and might be used with advantage

advantage when the fever languishes, like this, (without pointing to any particular cause of protraction) even in lower degrees of inflammation. Indeed, the conjunction of so general an anasarca, with any fever which does not appear an exquisite typhus, in the first days, must give suspicion of partial plethora, or congestion, in some part of the system, and excite attention to the slightest inflammatory symptom. The palpitations of the heart, which only supervened within the last two days, were probably owing to the firm adhesion of the pleura lining the ribs, to that covering the right lobe of the lungs, which impeded both circulation and respiration, and to the encreasing effusion of fluid into the pericardium.

The pain in the abdomen, which I have often remarked in dilatations, and inflammatory affections of the heart, was present here, but was not so violent, nor of such duration, as to afford suspicion of disease in the thorax.

In

In every case of fever, attended with unusual appearances, the practitioner ought to be aware, that the symptoms which force themselves on his attention, do not always form the whole, nor the most formidable part of the disease: he must, under such circumstances, keep the remotest causes and consequences in view, and rather risk something officious, such as the application of blisters, when no local pain, or injury of functions seems to demand them, than suffer the patient to be destroyed, without making an effort for his preservation.

As there was no vomiting, in this case, I do not think it could be properly named a peripneumonia notha, conjoined with typhus. But this fact, with many others, which it is unnecessary to mention here, proves that the lungs, as well as the heart and liver, may suffer irremediably, from lingering, imperceptible, yet destructive inflammation *.

From

* A very similar case is to be found in Lieutaud. Obs. 384. Juvenis duodetriginta annorum, *leucophlegmatia,*

From these facts, many important conclusions may be drawn, respecting the prognostics and cure of diseases. The subject is capable of admitting very extensive research, but considering this paper as a slight sketch only, indicating what may be done by other observers, I shall content myself with some of the most obvious deductions.

1. Whenever local inflammation supervenes to an acute disease, it shortens or extinguishes the original disorder. Hence one great source of perplexity, in such cases as that of *S. S.* (p. 60) where the inflammation does not betray itself by its proper symptoms, yet the feverish symptoms cease, or at least are greatly mitigated by the conversion.

 An

legmatia laborans, inter remedia huic morbo dicata, repentina morte tollitur.

Thorax sinister pure repletus invenitur, nullis fermè manentibus pulmonis reliquiis Non tussiebat æger, in utrumque latus decumbebat: nullum, uno verbo, fuerat morbi pectoris indicium, quod sane mirari subit.

Histor. Anat. Med. tom. 1. p. 534.

An important rule in practice may be formed, from this observation. In those alarming cases, where pneumatic inflammation supervenes to synochus, or typhus, the cure of the fever may be in a great measure trusted to the supervening disease, and our attention may be chiefly directed to the progress of the inflammation. By this means, contra-indications will be avoided, and the safety of the patient will be better consulted, than by the temporizing practice usually adopted on such occasions. The danger, or salubrity of this conversion, appears to depend greatly on the nature of the part attacked by inflammation. If it be a conglobate, or conglomerate gland, the fever is often*, though not constantly, extinguished without hazard; but if the brain, the pleura, or peritoneum are inflamed, whatever becomes of the fever, the importance of those parts

* It will appear, from the case mentioned in p. 32, that the existence of an external inflammation should not induce practitioners to neglect the fever; indeed, no perplexity, nor contra-indication need arise from it.

parts to life, renders the progress of inflammation in them highly dangerous.

It is easy to explain from hence, why in patients, who die in typhus, of suppuration in the brain, the fever often seems at a stand, for some days before death; at least the patient, to an incautious observer, appears not materially worse. The original fever is mitigated, in proportion to the advance of a fatal inflammation. In like manner, the encreased energy of the brain, produced in mania, relieves, or cures dropsy, and other diseases, depending on a want of action in the system.

This deduction serves also to explain the action of blisters, which, by producing local inflammation, imitate the process, and in proportion to their action, exhibit the effect, of this kind of conversion.

Hence also, the salubrity of the gouty inflammation, when it seizes a part not necessary to life. This differs from other kinds

of

of inflammation, in its power of extinguishing chronic diseases, such as dyspepsia, or nephritis of long standing. May we conclude from this circumstance, that attempts to excite inflammation in chronic disorders, either by blisters, or rubefacients, ought to be more frequently made, and more varied, than is usual in the present practice?

It must be added, that general fever sometimes cures local inflammation; Mr. HUNTER says, he has seen a gonorrhœa extinguished, by the accession of a fever. Some facts of this sort appear to have impressed the mind of that excellent observer, and to have given him a confused idea of the existence of conversion. But his theory of the incompatibility of similar morbid actions, in the living body, amounts to nothing more than a recital of facts, in abstract terms. It is too common, for modern philosophers to mistake such recitals, for the investigation of causes. When we consider, that, besides the facts respecting general fever, there are many

unexpected

unexpected and dangerous conversions, in the class of exanthemata, from the eruptions, after they have been completed, to inflammation of the internal parts: that in erysipelas, we are not yet acquainted with all the circumstances, under which inflammation is translated from the skin to the brain; and that the translation of pus from its original seat, to a distant part of the body, is not yet reduced to any rules, from which we may learn to expect it; we perceive, at once, a great deficiency in medical science, and a train of enquiry, equally curious and useful.

The histories of several chronic diseases, are absolutely cases of conversion: to be convinced of this, we need only to refer to SYDENHAM'S descriptions of hysteria and gout. The numerous tribe of disorders, occasioned by alterations in the structure of the abdominal viscera, exhibit similar phænomena. Scirrhous obstructions of the mesenteric glands shall present the appearance of colic, or dyspepsia, while scirrhus of the liver is masked under

under symptoms of jaundice or dropsy. When we find so many acute diseases convertible into each other, it seems not impossible, that by investigating their connections in this respect, an unity of cause may be discovered, among affections, which, at present, appear essentially different, and that new light may be thus thrown, on the most obscure doctrines of pathology.

2. The convulsion denominated hysterical, when it seizes the muscular fibre, in cases of conversion, is always salutary, and may be regarded, in many instances, as the crisis of chronic diseases. There is great similarity in the effects of *electricity*, excepting that its action is momentary ; and when it is considered, that the movements which it produces, in paralytic limbs, are truly convulsive, it seems not improbable, that its advantages arise, from its exciting a transitory effort of that nature. The more permanent action of internal stimulants and tonics, may be supposed to excite the convulsive effort, in a still

still lower degree, which may be illustrated, by considering the effects of arsenic, in different doses: a few grains of that mineral, are capable of producing the most fatal convulsions; the sixteenth part of a grain, repeated at proper intervals, operates as a safe and beneficial tonic.

The accession of epilepsy, it is said, has cured an intermittent of long standing; the same effect has resulted from the cold bath, which gives a strong, momentary shock to the brain. Convulsive movements appear to be most useful, by destroying morbid actions, which have been perpetuated by habit. Hence the utility of cold bathing, in lingering cases of typhus, where the usual stimulants have lost their effects. In inflammatory diseases, the accession of convulsions, or spasm, is commonly dangerous; as in the inflammation of the gums, and symptomatic fever, attending dentition; indeed, the conversion of a strong irritation, from any part of the system to the brain, is always hazardous. This is evident

evident from the consequences of conversions of inflammation, from the lungs to the head, in pneumonic cases, or from the skin to the head, in erysipelas, and in many instances of retroceding, or misplaced gout. Considered under this point of view, the analogy between the effect of these conversions, and that of tonic and stimulant remedies, in like circumstances, becomes very striking and instructive. It must be observed, that no good effect is derived, from the accession of a stronger, or more general convulsion, or spasm, to one weaker, or more partial; as when epilepsy succeeds to chorea, or tetanus to trismus. But to all these cases, the hysterical convulsion must be understood to form an exception; for I apprehend, we are not yet sufficiently acquainted with its influence on the progress of diseases, to set any limits to its action.

3. It is so far certain, that medicines operate by producing conversions, that we perceive very considerable diseases resulting from

from the use of certain remedies, such as mercury; and we judge of the extinction of the original complaint, in some measure, by the encrease and permanency of the remedial disease. I have mentioned a case (p. 51) in which the mercurial ulceration of the tonsils was so great, that a practitioner mistook it it for the venereal ulcer; and Mr. Hunter has given several cases, where the mercurial ulceration had out-lasted every symptom of lues, and proved an intractable complaint. In like manner, Dr. Darwin has observed, in his ZOONOMIA, that some derangements of mind cannot be removed, without exciting an artificial delirium, by means of opiates.

When we give diuretics, or cathartics, in dropsy, we endeavour to excite a disease in the intestines, or kidneys; for an extreme increase of natural action, in any part, is certainly morbid. A conversion of ascites to diarrhæa, and to chronic inflammation of the intestines, is, in reality, a common occurrence, and almost always fatal. We should learn

learn from this fact, to avoid the use of irritating purgatives, or at least not to employ them familiarly, in cases of ascites.

To ascertain the diseases, produced by the long use of particular remedies, would be an object of considerable utility. We know, already, the mercurial hectic, the dyspepsia, arising from the too familiar employment of tonics, the apoplexy, produced by the imprudent use of cold-bathing, and the phrenzy occasioned, under particular circumstances, by the use of warm mineral springs. But we possess these, only as detached facts, from which no general conclusions can be formed; and since the mischievous prejudices against bark and opium have been exploded, we have, perhaps, erred on the contrary side, by supposing the general action of medicines to be salutary in itself, and consequently, by neglecting to investigate their ultimate effects on the constitution.

4. It may be regarded as a general rule, that

that internal inflammation, supervening to chronic diseases, while it is equally dangerous with a similar conversion of acute disorders, has less tendency to extinguish the original complaint. Thus, inflammation of the pericardium, is frequently discovered, in dissections of persons who die of general dropsy *, or of other chronic complaints, in which the affection of the pericardium seems to be a casual conversion, which, indeed, hastens death, but does not arise from any necessary connection with the original complaint, or with its usual conversion. Thus, pneumonic inflammation, supervening to intermittents, runs its course without extinguishing, or changing the type of the fever †.

I have already noticed the conversion of dropsy, to inflammation of the bowels: chronic inflammation of the liver seems, also, to form

* Lieutaud Hist. Anat. Med. t. II. p. 19, 72, 73, 74, 75. obs. 469, 470, 695, 696, 697, 698, 699, 700, 701. See also the whole sections, p. 66, 67.

† Bonet. Sepulch. p. 1428.

form the termination of some lingering dyspeptic complaints, but the train of symptoms, from which it may be expected, is not yet ascertained.

Even the gouty inflammation, when it seizes an internal part, loses its salutary tendency, and assumes the most dangerous form, consistent with the symptoms proper to inflammatory affections of the particular organ attacked, without pointing to any curative conversion.

5. Cutaneous eruptions often extinguish dangerous diseases. Excepting the regular exanthemata, such conversions seldom happen in acute disorders; I have known acute rheumatism accompanied, in two cases, with efflorescences on the legs, but they seemed to have no effect on the pains. Madness and melancholy, epilepsy, delirium, protracted after fever, dyspepsia, various pulmonary affections, are all observed to be mitigated, or removed, on the appearance of cutaneous disorders;

disorders; especially on the return of those, which, after becoming familiar, had been suddenly suppressed.

In electrifying patients for obstinate cases of palsy, I have often remarked, that the patient received no benefit, till red, fiery eruptions were produced, on those parts of the limb which were surrounded by the chain.

Some practitioners have imagined, that much could be done, by producing crops of pustules on the surface by stimulant applications, in diseases of the lungs and the joints. My experience of this method furnishes no proof of its efficacy.

Perhaps, as I have suggested elsewhere, a specific eruption is requisite, in such cases, more frequently than we are aware.

In general, there is no safer conversion than that to the skin; the distance of the affected part from those necessary to life; the

varieties

varieties in the state of circulation, to which it is habituated, and the easy application of external remedies which it admits, combine for the security of the patient, whenever a disease is fully translated to the skin. Sudden conversions from the skin to the internal parts, are, I believe, universally dangerous, whether they interrupt the course of an acute, or a chronic disease.

Some affections of the skin, though they happen in consequence of acute diseases, seem to have no effect on the original complaint; such are, petechiæ in typhus.

In the second case, published in the *Medical Histories and Reflections*, there is a curious instance of connection between an erythematous state of the skin, and convulsions, attended with racking pain in the stomach.

6. Respecting hæmorrhages, I have nothing to add to the observations of former writers; for abundant pains have been bestowed

stowed on conversions, arising from inequality of circulation. It may be proper to repeat, that the presence or absence of the hysterical effort, materially affects the prognosis, in all cases of hæmorrhage.

Old men not unfrequently die, after discharging blood from the urethra, for some days. This appears to happen from ulceration, or other disease, in the kidneys*.

7. As it appears, that many conversions are processes, instituted by nature for the cure of diseases, and that some of the most active remedies operate in a similar manner, we may not only improve the history of diseases, but the practice of medicine, by paying closer attention to the connection, and operation of disorders upon each other. With this view of the subject, the most complicated cases will admit an instructive developement, and every additional fact may find an useful place.

In

* Lieutaud, Hist. Med. Anatom. t. 1. p. 249 and 258.

In pursuing this train of observation, we may be confident, that we are really following the order of nature, and that the result will be, not an arbitrary system, but an accession of solid, and applicable knowledge. Thus a foundation may be laid, for a natural arrangement of diseases, and a just theory of the sanative motions of the human system: splendid objects for the ambition of another age, to which we can only hope to contribute a few materials!

Thus a check may be given, also, to the unprofitable custom of publishing single cases, which, some rare instances excepted, are of little more public utility, than the moral tales of a monthly magazine.

The accession of epilepsy to dropsy, noticed at p. 35, was inserted on the occurrence of the case, after this essay was ready for the press. This will explain a seeming contradiction in p. 52, which I had neglected to alter.

OF INSANITY.

Vestibulum ante ipsum
Luctus et ultrices posuere cubilia curæ. Virg.

OF INSANITY.

There are few subjects on which information is more ardently desired, or more difficult to be communicated, than this of insanity. The philosophical consideration of the causes and symptoms of this disease, involves the most intricate operations of intellect, and the ideas of them obtained by the most patient and laborious attention, require talents far beyond the usual standard of merit, for their expression. Those who would gain a knowledge of the symptoms of madness from books, more particular than that afforded by ARETÆUS, must consult SHAKESPEAR and RICHARDSON; as the Greek physician learned the signs of love from the verses of SAPPHO. From a want of that exquisite discernment

cernment in the traces of character, which rather qualifies a man for the composition of poetry or romance, than for pathological discussion, some medical writers have limited their arrangement of mental disorders too narrowly, while others have extended the empire of insanity to so many transitory excesses of passion, as to share with DAMASIPPUS in the ridicule of supporting the old stoical paradox.

Before a comprehensive view of this subject can be obtained, it will be necessary for those who are accustomed to see insane persons, to communicate the result of their observations simply, according to the impression they receive, without referring to a system, or hoping for one. To this must be added frequent inspections of the dead, which continually present so many unexpected appearances, and render our views in prognostics at once extensive and cautious. I proceed to mention a very few detached facts, in conformity to this plan.

In

In maniacal cases, false perception, and consequently confusion of ideas, is always a leading circumstance; as far as I could ever learn from maniacs, surrounding objects appear to them to be on fire, at the beginning of their disorder; and like wild animals, they are sometimes disagreeably affected by particular colours, which excite their indignation to a violent degree. In consequence of these sensations, added to their own hurry and confusion of thought, they are by turns timid and outrageous. When a lunatic attempts to strike, it is generally by surprise, or when he expects no resistance; a determined opposition disarms him:

> "Man but a rush against Othello's breast
> "And he retires."—

The confusion of thought may be traced in all its degrees, in different cases, from a want of the common power of concluding, to an inability of completing a single sentence. In many maniacal cases, the disease seems to consist in incitation, and, as it were, inflammation

mation of thought, so that the mind is not allowed leisure to form any judgment concerning the ideas presented. A similar state of the faculties is experienced, on the morning succeeding a debauch in wine. In other cases, every past idea is recollected with great accuracy, and the patient repeats long trains of occurrences, or of arguments, either in soliloquy, or in reply to something said by the attendants. I have often witnessed astonishing exertions of memory, carried on in this manner, for several hours without interruption. There appears, in such cases, little more incoherence than would be found in the discourse of a rational person, if he were to utter all his ideas aloud, without reserve.

There are inferior degrees of mania, in which the patient preserves a strong command over himself, though disposed to use violence against individuals. I have seen a maniac, after committing a single outrage, master himself so completely, that no signs of his disorder could be detected during six months

months confinement; but from the moment that a sally of passion threw him off his guard, he became furious and ungovernable.

Even in the frantic state, attention and memory are not always abolished: a furious maniac will sometimes throw out a smart retort upon those who address him, which proves that he knows his own situation, and that of his attendants.

The obstinacy of false perception, once admitted, is incorrigible. A maniac, confined in a house situated on a small brook, fancied himself the owner of several vessels which were daily expected in port. Though he saw patients, who were allowed more liberty, step over the brook many times in the day, he always rose when the moon shone, to see whether his ships had entered the river. Upon similar occasions, persons unaccustomed to lunatics, expect to do some service, by trying to convince them of their error; but the attempt is always unavailing; the patient will

will even admit some distinction, yet recur to his favourite idea. A gentleman now under my care, believes himself to be of royal extraction; when I accost him by name, he says, that to his physician he is indeed Mr. —, but to all others he is the prince-royal of Spain, and from them he expects the ceremonies due to his birth.

When lunatics attempt to write, there is a perpetual recurrence of one or two favourite ideas, intermixed with phrases which convey scarcely any meaning, either separately, or in connection with the other parts. It would be a hard task for a man of common understanding, to put such rhapsodies into any intelligible form, yet patients will run their ideas in the very same track for many weeks together.

If the violence of any passion has been among the immediate causes of insanity, that passion is brought into action with great fury, at some period of the disease, and pride, an-

ger

ger, or love, becomes a distinguishing feature. Fear produces an immediate expression of the strongest kind, deprives the maniac of speech, and renders his countenance a hideous caricature.

The contrary state to false perception, is an intensity of idea, which constitutes melancholy. The maniac, as Mr. Locke has observed, reasons justly, though from false premises, being deceived in his first impressions: the melancholic, on the contrary, perceives, not wrongly, but too intensely regarding some objects, which induces him to grant them an exclusive attention, and leads him to reason improperly, even concerning his truest perceptions.

A melancholy patient, despairing of his circumstances without foundation, was persuaded with much difficulty to draw up a short statement of his affairs, which he did with great accuracy. He placed his debts in one column, and his property in another, op-

posite,

posite. But no arguments nor intreaties could prevail upon him to compare the columns, by which it would have appeared that he was master of a considerable sum: his attention was wholly occupied with the list of his debts, and he obstinately averted his eyes from the other column.

There is a case in which melancholics appear to have false perceptions, but I think it resolvable into intensity. This is when such patients accuse themselves of murder, or some other enormous crime, which they have not committed. This may happen in two ways: 1. Many cases of insanity consist of a mixture of mania and melancholy, in their commencement; in this state of the disease visions are common, which are referred to the prevalent ideas in the patient's mind, and are remembered as real occurrences, when pure melancholy has predominated. 2. Even in cases purely melancholic, the patient may mistake a dream for a real event.

Melancholics

Melancholics are always apt to impute their uneasy feelings, especially those arising from flatulence, to demoniacal action, and they will form the most extravagant suppositions, to account for the entrance of the demon into their bowels. Upon this subject it is vain to reason, and whoever attempts to ridicule the patient, loses his confidence entirely.

One of the most unhappy states of melancholy, is that in which the patient suspects an intention to poison him. With this impression, he obstinately refuses every kind of nourishment, and, unless managed by skilful attendants, dies of famine. I once saw a patient who had passed a fortnight without food, and who died of mere inanition: he resisted, to the last, every attempt to force a little wine into his mouth.

I have very generally found congestion in the brain, and effusions of water into the ventricles, on examining the heads of melan-

cholics

cholics after death: I have never been able to trace any connection between the symptoms of the disease, and the appearances on dissection, excepting in the cases I have mentioned elsewhere, of conversions to epilepsy, from maniacal disorders of long standing.

When a maniacal fit is going off, an appearance of stupidity and heaviness is rather a favourable symptom: the length of the lucid interval is generally proportioned to the degree of this appearance.

All degrees of insanity which affect the temper more than the understanding, are obstinate, as far as I have observed; and as these often happen in persons who seem otherwise perfectly healthy, there is a total want of indications in such cases. There is, however, an incurable sort of insanity, in which the patient, with great good-nature, is constantly on the watch for an opportunity of telling falsehoods. This is commonly a mixture of mania and melancholy. A lunatic of this sort makes

makes himself the hero of every subject that chances to be mentioned in his hearing:

———— "Dives,
"Liber, honoratus, pulcher, Rex denique regum."

Maniacal disorders are commonly exasperated in women, about the period of menstruation; in recent cases, a mitigation of the paroxysm, or even a complete intermission may be expected to follow the period, but in chronic cases no effect is to be derived from this incident, expecting a slight exacerbation of the disease, from the agitation of the menstrual effort. When a lucid interval does happen, immediately after the period of menstruation, it seldom continues longer than a a few days.

The most general causes of insanity which I have had occasion to notice, are hard drinking, accompanied with watching; pride; disappointment; the anguish arising from calumny; sudden terror; false opinions respecting religion; and anxiety in trade. These operate

operate chiefly on men.—From the peculiar situation of the other sex, their minds are sometimes deranged by the restraint or misdirection of passions, which were bestowed to constitute their happiness.

Many cases of conversion produce insanity; this disorder supervenes on the imprudent suppression of eruptions; on the extinction of continued fevers, or of pneumonic inflammation; on the extension of scrophula to the glandular parts of the brain; and on the irregularities of circulation produced in the puerperal state. Lieutaud mentions a woman, who was affected with mania, in consequence of a suppression of the menses, in her fiftieth year. She continued insane during seven years, and was restored to her senses by an uterine hæmorrhage *.

In recent cases of mania, there is commonly much disorder in the functions of the stomach; vomiting, therefore, is usually employed,

* Hist. Anat. Med. tom. 1. p. 320. obs. 1369.

ployed, and it not only relieves the patient from a temporary cause of irritation, by clearing the first passages, but sometimes produces a favourable change in the mental disease.

M. P. a young woman, came under my care, Sept. 5th, 1792; she was in a state of furious agitation, and her ideas were totally confused. She could not be brought to attend to any object; and it was impossible to obtain an answer from her to any question. I ordered her a vomit of tartar emetic, in the usual manner, which operated briskly, and had an instantaneous effect in restoring a degree of rationality. On the 10th (five days after), the report was, "continues rational." She was discharged cured, soon afterwards. Such a degree of success must not often be expected from this remedy.

Emetics are sometimes useful, in diverting patients from capricious resolutions. An elderly gentleman, in a state of melancholy, determined

termined to retain his urine, and persevered in his resolution during three days and two nights, though evidently with great pain and difficulty. I ordered some doses of emetic tartar to be mixed with his food, which he took with some caution; copious vomiting was excited, and at the same time he parted voluntarily with a large quantity of urine; the sudden stimulus given to the distended bladder, by the action of vomiting, proving too strong for his resolution. This caprice did not return upon him afterwards.

The repetition of vomits, and the use of antimonial preparations, in nauseating doses, are certainly proper in maniacal cases: the uneasy sensations which they excite, seem to recal the patient's attention to a regular train. But in melancholics, the addition of these depressing ideas would only encrease the disease, by furnishing an opportunity for some new fancies; melancholy madmen being, as I have already observed, great theorists. Though a single emetic may do considerable

siderable service, therefore, in such cases, it ought not to be repeated without a manifest indication *.

In maniacs, who are young and plethoric, whose eyes are turgid or inflamed, who pass the night without sleep, and whose pulse is quick and full, general blood-letting ought to precede the use of emetics. A lady of a full habit, who was seized with maniacal symptoms after a slight fit of cholera, was restored to her senses by a single, copious bleeding. But the repetition of this remedy is nice and difficult, as it is seldom capable of removing the disease, without the conjunction of other methods, and as an extraordinary loss of blood may precipitate the patient into an irrecoverable state. I have seen maniacs bled till they became melancholy, and melancholics, by repeated venæsection,

 reduced

* Since the former sheet was printed, the girl, mentioned in p. 95, has again been put under my care, in a state of furious mania, and has again been cured by exhibiting emetic tartar, first in vomiting, afterwards in nauseating doses.

reduced to despair. It is only in case of evident congestion, with an apoplectic tendency, that the repetition of bleeding can be reckoned admissible. I have, indeed, twice known maniacal paroxysms removed by a single bleeding, but they were both recent cases, and in one a relapse soon followed; in the other, there was a conversion to palsy, and afterwards to apoplexy. There is always reason to suppose congestion in mania, after fevers; but when congestion happens in habits much reduced by the previous disease, general evacuations must be very cautiously employed. Those facts which I have mentioned elsewhere, relating to the occurrence of spontaneous hæmorrhage in cases of typhus *, seem to admit a greater latitude in this respect, than has hitherto been permitted. Some practitioners prefer bleeding in the neck, in this disorder, but I have not been able to discover, that it is more effectual than bleeding in the arm.

Purgatives

* On the Conversion of Diseases, p. 11.

Purgatives are undoubtedly useful in most cases of insanity; but only when moderately given. I have used the celebrated melampodium in a great number of cases, so as to purge the patient gently, twice or thrice a week: I have found no reason to believe that it operates otherwise than as a cathartic. For a considerable time past, I have preferred calomel, both as a safe and easy purgative, and as considerable hopes have been excited, of benefit to be derived from its proper action as a mercurial preparation. I shall give here the result of my observations respecting this remedy, in which, I confess, I have been much disappointed. Farther experience, and a nicer discrimination of the scrophulous causes of insanity, against which nothing can be hoped from mercury, must fix our opinion decisively respecting this method of treatment.

1. *J. J.* a young man, of a full habit and florid complection, after receiving some gloomy religious impressions, fell into a fretful, discontented state, and in the course of a few

few weeks became maniacal, with a mixture of melancholy. When I saw him, his eyes were inflamed and looked wildly; he was restless, querulous, and irascible. Bleeding, vomiting with emetic tartar, and purgatives were used without effect. He was then put upon a course of calomel, which was continued till his mouth became very sore, without any abatement of the maniacal affection.

2. Mrs. *T.* a married woman, of middle age, became melancholy without any sensible cause. She talked incoherently, was fretful, and frequently wept. Not long before I saw her, she had made an attempt upon her life. She took calomel, with opium, from the 21st of June to the 5th of July, when, her mouth being very sore, the mercury was discontinued, and the opium was given alone. The bark was afterwards thrown in: under this course, she became rather more composed, but no benefit was obtained, proportioned to the activity of the remedies.

3. An

3. An elderly gentleman, who has been for several years in a state of amentia, has twice been affected with a considerable herpetic eruption on the neck and shoulders, for which calomel was administered in the form of Plummer's pill. His mouth was made very sore, each time, and the eruptions were removed, but no effect was produced on the state of his mind.

4. Mrs. *J.* a married woman, about the age of forty, was affected with a mixture of mania and melancholy. About the commencement of the mental disorder, her skin became diseased, and was covered, when I saw her, with a furfuraceous eruption. To remove this cutaneous affection, appeared a rational indication. She was put upon a course of Plummer's pill, and her mouth was made sore, but no relief was obtained.

5. Mr. *T. P.* a maniac, not furious, but full of troublesome, false perceptions, among other remedies, was ordered a course of calomel

omel with opium. His mouth was affected after some time, when finding no benefit from the medicine, I omitted it.

This remedy was tried in several other cases, of which my notes are incomplete, with equal ill success. It is proper, however, that I should mention two instances, where, if the calomel alone did not cure, it must be allowed to have assisted in restoring health.

6. *J. B.* about twenty-six years of age, had been for some time in a state of furious mania, when I saw him. He took vomiting doses of tartar emetic, and afterwards, two grains of solid opium at bed-time, which was gradually encreased to seven grains, twice a-day, without any sensible advantage. The opium was given, nearly during *two months*, and he took fourteen grains a-day, upwards of a week. Finding it of no use, after so full a trial, I omitted it, and ordered him to go thrice a week into the warm bath, to remain there a full half hour each time, and

to

to take three grains of calomel every night, at bed-time. During this course, his fury abated, and he became brutal and stupid. His mouth was pretty severely affected, during several weeks. The mercury was continued or omitted, according to the state of his gums, and at the end of five months he was completely cured.

In this patient, there was great obduracy of natural temper, and insensibility to remedies. It was therefore necessary to institute a tedious mercurial course, in order to produce the desired effect. I believe the long immersion in the warm bath must be allowed to have operated, both by calming his fury, and by disposing the system to favour the mercurial action.

7. A lady of a domestic, industrious disposition, fell by degrees into a maniacal state, which discovered itself chiefly by an uncommon levity in her conversation and behaviour. She could recollect, but never totally restrain

restrain herself; was noisy, familiar, and constantly disposed to run and jump about. Her perceptions were quick, and I could not discover that they were, in any instance, false: so far the case was very singular. She had a considerable tumor, on account of which there was a necessity for her submitting to a painful operation, of some length, soon after she came under my care. She consented to the proposal, bore the operation with great firmness, and recovered from it without a single bad symptom: in every thing relating to it, she perfectly understood her own situation. But when the wound was healed, her mental disorder did not appear to be abated. As she was now in full health, I put her on a mercurial course, but I found that small doses of mercury operated with her as strong cathartics. Her habit was so full, that I saw no inconvenience from throwing in the medicine, so as to support a loose state of the bowels; it was therefore continued for nearly three weeks. The usual dose of calomel, during the latter part of that

that time, was only half a grain, and her mouth, as may be supposed, never became sore. After the calomel was given up, a spontaneous diarrhæa came on, which seemed to relieve the mental affection. She took two grains of opium every night, but I was not anxious to check the discharge, as her mind became more composed during its continuance. The diarrhœa gradually ceased, and she remained free from every maniacal symptom after its disappearance. The spontaneous diarrhœa, I conceive to have been an effort of the constitution, in one word, a conversion, by means of which the affection of the brain was extinguished. It is probable, that the purging excited by the mercurial course, might in some measure determine the nature of the effort, and turn that force to the internal surface of the intestines, which might otherwise have been exerted on the hæmorrhoidal, or uterine vessels. So far this case seems to encourage the practice of brisk purging in maniacs. But few instances occur, in which the patient's robust, and even

luxuriant

luxuriant health, and undisturbed natural functions, will equally justify the carrying this method to any great extent.

Upon the whole, I think calomel deserves to be farther tried in cases of insanity. In some recent instances of mania, I have used emetic tartar in nauseating and vomiting doses, and have immediately followed up the exhibition of that remedy with small doses of calomel, till the gums have become affected: I have then given the bark. As far as I have tried this method, it seems to answer very well, in mixed cases of mania and melancholy, or in mania arising in weak habits, where there are no symptoms of congestion, or of oppression of the brain.

The liberal use of bark and wine is clearly indicated in many cases of melancholy. A weak pulse, want of appetite, flatulence, emaciation, and expressions of grief and fear, similar to the low delirium in typhus, are often united in this complaint.

A. G.

A. G. a married woman, aged about thirty-six, fell into a deep melancholy, attended with the symptoms I have just described; after evacuating her bowels, she was ordered the bark in substance, which removed all her complaints in less than a fortnight.

J. H. a young man, was reduced by the same series of complaints to a state of great weakness, and at length to complete amentia. He had some doses of calomel, but not in sufficient quantity to affect his mouth. He was then put on the use of bark in substance, and of the cold bath. Under this treatment he recovered his strength and flesh, became more chearful, and was enabled to answer some questions. He has not yet recovered the complete use of his faculties.

E. B. an elderly woman, was attacked by a fit of deep melancholy, to which she had been formerly subject. Bark in substance, and the cold bath, were directed for her, with an opiate at bed-time. She was cured in six weeks

weeks, but relapsed about the same time in the succeeding year.

For the other general remedies of insanity, I must refer to what I have published in the first part of the *Medical Histories and Reflections*.

The management of the mind is an object of great consequence, in the treatment of insane persons, and has been much misunderstood. It was formerly supposed that lunatics could only be worked upon by terror; shackles and whips, therefore, became part of the medical apparatus. I have absolutely seen, among the rules of a lunatic hospital, one which declared, "that the keeper might "beat the patients, provided it were done "with discretion, and by order of the phy-"sician!" I will go no farther into this shocking subject; it is now unnecessary to withdraw the veil, which covers the tortures, the murders, which at a former time were inflicted on this wretched class of patients, in places provided for their reception. A sys-

tem

tem of mildness and conciliation is now generally adopted, which, if it does not always facilitate the cure, at least tends to soften the destiny of the sufferer.

I have seen great exertions thrown away, in attempting to influence lunatics by arguments, or to surprise them into rationality by stratagem. I never knew such endeavours answer any good purpose. The stories current in books, of wonderful cures thus produced, are, like most other good stories, incapable of serving more than once.

A system of discipline, mild, but exact, which makes the patient sensible of restraint, without exciting pain or terror, is best suited to those complaints. In the furious state, the arms, and sometimes the legs must be confined, but this should never be done when it can possibly be avoided. When the patient is mischievous and unruly, instead of ordering stripes, I shut him up in his cell, order the window to be darkened, and al-

low

low him no food but water-gruel and dry bread, till he shews tokens of repentance, which are never long delayed, upon this plan. Previous to this kind of punishment, I find it useful to remonstrate, for lunatics have frequently a high sense of honour, and are sooner brought to reflection by the appearance of indignity, than by actual violence, against which they usually harden themselves.

It is owing to the sense of restraint, that lunatics recover more quickly when they are removed from home. While they remain with their friends, the disease seems to acquire additional strength, from the concern and exclusive attention of which they are the objects; among strangers, they find it necessary to exert their faculties, and the first tendency to regular thinking becomes the beginning of recovery. It must be acknowledged, that the desire of returning home sometimes grows ungovernable in melancholics, and it becomes necessary to indulge them with a short interview with some object of particular

particular attachment. At such times, it is dangerous to relax too much, and to favour the error, under the influence of which, their partial relations mistake the earnest desire of returning, for the revival of reason. Much self-restraint, much eloquence, and artifice, are often shewn by the patient on these occasions, which, according to the management of the attendants, prove either salutary or mischievous.

Though I would exclude every thing painful and terrible, from a lunatic-house, yet the management of hope and apprehension in the patients, forms the most useful part of discipline. Small favours, the shew of confidence, and apparent distinction, accelerate recovery; while seclusion and solitude, diminution of light, and privation of the customary food, mitigate the furious and malicious patients.

It has long been my wish, that a room might be appropriated in our hospital, to convalescents,

cents, and that the privilege of admission to it might be made the reward of regular behaviour among the patients. Such a distinction would act powerfully in creating a habit of self-restraint, the first salutary operation in the mind of a lunatic. For in the cure of diseases of this nature, the patient must 'minister to himself;' medicine may restore him more early and more completely to the command of his intellectual operations; discipline must direct him in their exertion *.

* I have known recovery take place, rather unexpectedly, where I could attribute it to nothing but the train of reflections, produced by the visits of the physician. The case to which I allude, was a mixture of melancholy and mania, but melancholy predominated greatly, and the frequent appearance of the practitioner excited much enquiry and speculation in the patient, which had a happier tendency than usual.

REMEDIES OF DROPSY.

REMEDIES OF DROPSY,

Continued from Vol. I.

In pursuance of the plan for establishing some general rules for the cure of Dropsy, I now lay before the public a short view of my hospital practice in that complaint, mixed with some private cases, since the publication of the former volume. From a sufficient number of facts thus collected, we might learn, what remedies deserve a preference on the first trial; how long the exhibition of any single medicine may be continued, when signs of recovery do not appear from its use; and in what manner hydragogues may be intermixed, with the greatest prospect of success. These are rules which books do not teach us at present: Dr. Cullen has even declined the task of specifying diuretics, in his

his *First Lines*, because he could find no reasons for choosing among them in practical authors. The want of discrimination in this matter, is a defect which every young practitioner must feel strongly, and which can be but slowly supplied; for the majority of dropsical disorders are inevitably fatal, and the palliative practice which incurable cases require, is not very instructive.

CREAM OF TARTAR.

HIST. I.

Joseph Bradshaw, aged forty-seven, admitted March 5, 1792, had a troublesome dry cough, pain in both arms, shooting down to his fingers, and orthopnœa. He had been ill three years, and unable, during a long period, to lie down in bed. His urine was scanty. He began the use of cream of tartar on the 6th, and on the 8th his urine was encreased, and he was much easier. He could now lie down in bed. On the 22d all his symptoms were gone, and the cream of

tartar

tartar was omitted on the 29th. His symptoms returned on the 26th of April, but were again removed by the cream of tartar, and he was discharged cured, May 15th.

HIST. II.

Magdalen Cross, aged seventy-four, admitted March 5, 1792, had been ill for three months, of considerable anasarca in the lower extremities. She took cream of tartar as usual, which purged her severely. On the 8th her swellings were nearly gone, and she was dismissed cured on the 4th of April.

HIST. III.

John Beswick, aged fifty-eight, admitted March 19, had anasarcous swellings of the lower extremities, of a week's continuance. He took cream of tartar: on the 22d his urine was encreased, and the swellings were less. He was discharged cured in a few weeks.

HIST. IV.

Joseph Wilcock, aged thirty-seven, admitted

April

April 30, had been suddenly attacked with anasarca ten days before: his scrotum was much distended. His urine was scanty. He took cream of tartar; on the 8th his urine was encreased, but the swellings were not diminished; on the 14th the swellings were less, and he passed a great deal of urine: on the 18th he was completely well.

HIST. V.

John Clough, aged fifty, came under my care, August 30th, with anasarca of both legs. There was an ulcer on the left, but no water drained off by it. He had begun the use of cream of tartar before I saw him, with little effect. I encreased the quantity to six drachms. On the 31st the swellings were less. On the 10th of Sept. they had entirely disappeared. I believe he has since relapsed.

HIST. VI.

John Birch, aged twenty-five, admitted Sept. 27, 1792, was seized with ascites and anasarca, after the confluent small-pox. He

was

was prodigiously distended, and the cellular membrane of the penis and scrotum was completely filled. He took cream of tartar; Nov. 3d, he was purged, passed more urine, and the swellings were less. On the 10th the swellings were much diminished; on the 16th they were almost gone, and he was discharged soon after.

HIST. VII.

Mary Newton, aged thirty-five, admitted Nov. 1792, had a dry cough, orthopnœa, and had been unable to lie down in bed for some months. She had considerable anasarca in the lower extremities, and some degree of it in both arms, but more in the left arm. She also complained of dull pain, and sometimes a tingling sensation, in the left arm. She began to take cream of tartar immediately, and as the cough was very distressing at night, she had small doses of opium and camphor at bed-time. Nov. 9th, she was much easier; her urine was encreased, and she was little purged. She continued easier, but

but the swellings did not abate till the 23d, when the feet seemed diminished, but the legs were much distended. On the 15th Dec. she was much better, and could lie down in bed. She was now taking six drachms a-day of cream of tartar. On the 20th the swellings were entirely gone, and her respiration was perfectly free; but she complained of rheumatic pains, which were removed in a few days, by the use of the pulvis sudorificus.

HIST. VIII.

A man, aged sixty, applied to me, March 3d, 1792, ill of ascites and anasarca. He had likewise a great degree of orthopnœa, and a distressing cough. His disorder had continued for a year and half, and the swellings had been preceded by a dry cough, orthopnœa, and tingling in his left arm and hand. I ordered him cream of tartar. On the 8th his swellings were less, and his urine was encreased; from the 10th to the 18th the swellings fell, and he passed much urine. On the 24th the swellings were stationary; two grains

grains of gamboge were therefore added to the cream of tartar. On the 25th he was better: by encreasing the dose of cream of tartar, to six drachms, and then to an ounce, and by occasionally adding gamboge, he was nearly well on the 4th of April; and on the 11th thought himself well enough to discontinue his medicines.

On the 16th of May, however, he returned, as much swelled as ever, and extremely costive; he scarcely passed any water. I ordered him a bolus, composed of squills, calomel, and gamboge, which operated briskly, and reduced the swellings. On the 30th the swellings were stationary. He was now purged with an electuary, composed of cream of tartar, gamboge, and jallap, but as the disorder did not give way to this method, I had recourse, on the 20th of June, to mercurial friction, and the regular use of spiritus ætheris nitrosi. At this time, the integuments of the scrotum and penis were greatly distended. His urine soon encreased in quantity,

and

and about the beginning of July his swellings began to diminish. In the middle of July, the swellings were entirely gone: he was then put on a course of tonic remedies. In the beginning of August, he could lie down easily in bed. He occasionally took doses of cream of tartar, and always with relief, when he was threatened with a return of his complaint.

Towards the beginning of December, he relapsed, and after trying various remedies with little relief, was ordered digitalis; the affection of the breast having become very distressing. By degrees he took the quantity of four grains a-day, and was sensible of some relief; on the 25th his swellings were much decreased, and in the beginning of January were entirely removed. His breathing became natural, his cough left him, and he could lie down in bed. No complaint remained, but weakness. Feb. 27th, he called on me, free from swellings and orthopnœa.

HIST.

HIST. IX.

Elizabeth Wells, aged fifty-eight, much debilitated with anasarca and ascites of long standing, began to take cream of tartar on the 8th of Dec. 1791. She obtained no relief, and died on the 28th of the same month.

HIST. X.

Mary Williams, aged two, was admitted 8th May, with anasarca and ascites, of two months duration. She was ordered a drachm of cream of tartar, in two ounces of mint-water, every night. On the 24th, her swellings were much lessened, and at the end of the month she was discharged cured.

HIST. XI.

Ann Lees, aged thirty, admitted June 18th, had been ill of ascites for a month. She was put on a course of cream of tartar, but being much debilitated, took a dose only once in two days, and used tonics occasionally. On the 19th of July, it was necessary to encrease the

the dose of cream of tartar to six drachms. In the beginning of August her swellings were gone, and she was seized with hæmoptöe, for which she was ordered digitalis, in encreasing doses, and the cream of tartar was omitted. On the 23d of August, she was nearly as much swelled as ever. The cream of tartar was then repeated, and she was discharged cured on the 8th of October.

HIST. XII.

John Roberts, aged fifty, admitted July 2, had ascites and anasarca of a fortnight's duration. He was ordered cream of tartar, and six ounces of the cerevisia diuretica were directed to be given warm, every night at bed-time. He was discharged cured on the 20th of August.

HIST. XIII.

John Campain, aged twenty-five, admitted July 23d, had been ill of anasarca for a fortnight. He took cream of tartar: my report of him on the 30th is, "much better; swellings down."

"down." He discontinued his attendance in August, probably having recovered.

HIST. XIV.

John Taylor, aged thirty, admitted January 2, had been seized with ascites and anasarca some weeks before, in consequence of exposure to cold. I ordered him to take half a drachm of Dover's powder at bed-time, which sweated him plentifully, and diminished the swellings in some degree. But as his urine did not encrease, and the swellings continued, he was afterwards ordered cream of tartar. On the 7th, his size was reduced, and his urine encreased. On the 9th, his swellings were almost gone, and the cream of tartar was omitted. A troublesome cough remained, which gave way to the common remedies.

HIST. XV.

Mary Leech, aged forty-eight, admitted July 1st, 1792, after a tedious dyspeptic complaint, and severe pain in the stomach,

was

was seized with ascites and anasarca. She had a cachectic appearance, and symptoms of obstruction in the liver. She was ordered to use friction with mercurial ointment, and to take the spiritus ætheris vitriolici. On the 17th she was costive, and the swellings were nearly in the same state. She was ordered to take five grains of gamboge, in a draught, with a drachm of spiritus ætheris nitrosi. This she threw up, and her complaints continued, but her urine was rather encreased. The cathartic draught was repeated. Aug. 7th, the swellings were encreased. She was then ordered two grains of gamboge, with half an ounce of cream of tartar, every morning. On the 20th, her swellings were gone, but she was extremely weak. She was put on a course of tonic remedies, but languished, without any appearance of recovery: the swellings did not return, but she died, quite extenuated, on the 15th of September.

HIST. XVI.

Frances Clough, aged seventy-four, admitted

ted March 8th, 1792, had been ill for six weeks, of anasarca, ascites, and hydrothorax. The swelling on the back of each hand was high and puffy. She began to take cream of tartar on the 8th. Next day she was easier. On the 18th her complaints were stationary: on the 24th, no better. She was now ordered a cathartic draught, with five grains of gamboge, and two drachms of spiritus ætheris nitrosi, which purged, but did not relieve her. On the 26th she continued very ill, and the backs of her hands were greatly swelled. She died on the 28th.

HIST. XVII.

Mary Thompson, aged thirty, was admitted Feb. 27, 1792, ill of ascites. She was ordered cream of tartar, which lessened her swelling, but as the purgative effect was severe, it was only given occasionally, and tonics were interposed. On the 19th of March, the spiritus ætheris vitriolici was substituted for cream of tartar, and she was dismissed cured in the beginning of April.

HIST.

HIST. XVIII.

Mary Smith, aged forty-two, admitted July 30th, 1792, had ascites; at the same time, there was a soft, inelastic tumor on the left side, which appeared to proceed from distention of the ovarium. She was ordered mercurial frictions, with sp. ætheris vitriolici. Aug. 9, there was no change. She was then ordered a draught, with gamboge and sp. ætheris nitrosi. On the 13th, she was costive; the local tumor was diminished, but the general fulness of the abdomen was the same. She was then put on a course of cream of tartar, and the former method was discontinued. On the 23d, the cream of tartar was encreased to six drachms, and the friction repeated. On the 6th of September, her swellings were much abated, but she was costive. She was ordered an ounce of cream of tartar every morning, and the friction was omitted. Nov. 8th, she was again costive, and the cream of tartar was encreased to ten drachms. On the 28th of December, she was nearly well. She was soon after discharged cured.

HIST.

HIST. XIX.

Peter Morgan, aged forty-two, admitted Dec. 1, 1794, with ascites and anasarca, took cream of tartar during a fortnight, with much relief; his swellings were abating, when he unexpectedly quitted the hospital, and disappointed me in my hopes of seeing a favourable event of the case.

HIST. XX.

John Mardley, aged sixty, was admitted July 30th, 1792; he had been ill of ascites and anasarca for a fortnight. He was ordered cream of tartar in the usual form. On the 2d of August, the dose was encreased to six drachms. On the 20th, the swellings were not diminished. Sept. 3d, however, the swellings were less. On the 13th, the cream of tartar was encreased to an ounce. On the 17th, the abdomen was diminished, but the anasarca was encreased, and extending upwards. He was much oppressed, and evidently worse on the whole. The cream

 of

of tartar was therefore omitted, and he was ordered to take half a drachm of the virga aurea in powder, twice a-day, with half a pint of the cerevisia diuretica. On the 20th, his swellings were the same, but he passed more urine: the virga aurea was repeated thrice a-day. On the 27th, his urine was still encreasing. On the 15th of Oct. the virga aurea was repeated four times a-day. On the 18th, he had no purging, passed more urine, and was less swelled. On the 22d, he was in the same state, but the virga aurea was consumed: six drachms of cream of tartar were therefore ordered every morning. Nov. 8th, the swellings lessened considerably; and continued to fall on the 12th. Dec. 10th, the cream of tartar was encreased to an ounce. On the 17th, the swellings were greatly diminished. Towards the middle of January, they were almost gone, but he complained of dimness of sight, and violent headachs. He sometimes observed, however, that the cream of tartar did not lessen his size so quickly as the green powder had done. In

February,

February, he was made an out-patient, and his attendance became irregular; but he was discharged cured about the middle of April.

HIST. XXI.

Sarah Hughes, aged fifty, was ill of ascites, with some swelling in the lower extremities. She had been affected with dropsy formerly, and had been tapped not long before she came under my care, but was now encreasing again in size. I put her on a course of cream of tartar, the dose of which was occasionally encreased, and in the course of two months her swellings were almost entirely removed.

HIST. XXII.

George Musgrave, was ill of anasarca, with some degree of ascites. I ordered him cream of tartar, in the usual manner, which reduced his swellings in the course of a few weeks. By returning too early to his work, he brought on a relapse, and an obstinate ascites was formed, which resisted cream of tartar, nicotiana,

tiana, and every other means of relief. Mercury was employed, as a last resource, but without effect, for he died, completely exhausted.

HIST. XXIII.

A gentleman, somewhat advanced in life, of a very delicate habit, and long a valetudinarian, consulted me in Dec. 1793, for a considerable degree of anasarca, and an incipient ascites. I directed the cream of tartar to be given, but in doses of two drachms only. It did not sensibly encrease his evacuations, either by stool or urine, but he soon began to walk up stairs with less difficulty, and in the course of a fortnight, his swellings were entirely removed. He has continued well ever since.

HIST. XXIV.

William Bradley, aged eight years, was admitted Aug. 19th 1794, ill of a typhus. In a few days after I saw him, ulcerations of the inside of the mouth and cheeks came on. When

When these symptoms were decreasing, by the use of tonics, he was affected with ascites and anasarca, and was soon greatly distended. I ordered him digitalis, but it proved ineffectual. I then put him on a course of cream of tartar, supporting him at the same time with wine. Under this method, the dropsical symptoms gave way rapidly, and he was discharged cured, Sept. 25th.

HIST. XXV.

George Adams, aged one year and three-quarters, had been ill of ascites for twelve months. He was ordered three ounces of the hydragogue solution every morning, which was encreased to five, and as the swellings abated, to eight ounces, in the course of six weeks. But the prospect of recovery was destroyed, by the accession of a smart teething-fever, in the progress of which his swellings returned, and he was carried off.

HIST. XXVI.

Ruth Ratcliff, aged twenty-five, was admitted,

ted, April 7th, 1793. She had been ill of ascites and anasarca upwards of two months. She was ordered the hydragogue solution, which encreased her urine, and diminished the swellings, and she was discharged cured on the 18th of August.

HIST. XXVII.

John Wood, a middle aged man, had been affected with ascites and anasarca for several weeks. He had an incessant, teazing cough, orthopnœa, and could not lie down in bed. He took the hydragogue solution, in the usual manner, and in six weeks was discharged cured.

HIST. XXVIII.

William Winterburn, an elderly man, was admitted Nov. 21st, 1794, ill of anasarca, incipient ascites, and very troublesome cough. He was ordered the hydragogue solution. In a few days, it was necessary to encrease the quantity of cream of tartar to six drachms a-day. On the 25th, his swellings began to

decrease;

decrease; he passed more urine and had two stools or more every day. On the 28th, his swellings were much lower, but his cough was still harassing. Dec. 12th, the swellings were nearly gone. On the 15th, his legs swelled again: the cream of tartar was encreased to an ounce. A few days afterwards, it was augmented to ten drachms; then to an ounce and half. In the beginning of April he was free from his dropsical symptoms.

HIST. XXIX.

Mary Byrom, aged forty-three, admitted Oct. 14th, 1793, had been ill of ascites for six weeks. She was ordered the hydragogue solution. On the 17th, she passed more urine, and her swelling had decreased two inches. A few days after, the cream of tartar was encreased to six drachms. The swelling was still lessening. But on the 4th of Nov. she again encreased in size, and her urine became scanty. The cream of tartar was continued, without effect, till the 21st, when it was exchanged for the tonic pills. They encreased her urine at first, though she did not take them regularly.

regularly. On the 20th January her swellings were nearly gone. She was then put on a course of tonics, and was discharged cured in the beginning of April.

HIST. XXX.

Mary Bury, aged nine, a girl of a cachectic appearance, had an ascites of several months standing. The abdomen was enormously distended, and was encreasing rapidly in size, when I saw her, March 20, 1794: she was put upon the use of the hydragogue solution. She took only two drachms of cream of tartar at first, but it was soon encreased to half an ounce, and afterwards to six drachms. On the 9th of April, the swelling had decreased an inch. She then began to complain of violent pain in the lower part of the abdomen, which returned every night. On the 11th, the swelling encreased again: gamboge with spirit of nitre was interposed without effect. On the 22d, she was seized with vomiting and purging of blood, and expired. I could not obtain leave to inspect the body.

HIST. XXXI.

Martha Yates, aged twenty-three, was seized with ascites and anasarca, after delivery: the dropsy had continued five weeks when I saw her. She had used various remedies, and among others two doses of *elaterium*, after the last of which her swelling encreased. March 30th, she was ordered the hydragogue solution, which purged her severely, and somewhat encreased her urine. The dose of cream of tartar was therefore lessened to two drachms. On the 4th of April, the swelling of the abdomen had decreased two inches and a half. She had many stools, and passed more urine. On the 11th she had fallen half an inch more; but this was the period of our good success. The swellings, after that time, encreased again, and her cough became more distressing. She was then ordered digitalis with opium, calomel with squills, and jallap, without relief. After this, I directed her to use mercurial frictions, and the spiritus ætheris vitriolici, till her mouth became slightly sore. The distention encreasing

encreasing, and great pain in the left side coming on, it was necessary to tap her. A considerable quantity of water was drawn off, after which I again endeavoured to affect her mouth by mercurial frictions. She began, however, to fill again, and the pain in her side returned. A variety of diuretics was employed; but the abdomen growing again extremely distended, another operation became necessary. After the second tapping, she continued to feel violent pain, and her strength sunk rapidly. She died in July, and I was not permitted to open the body.

HIST. XXXII.

Robert Berry, had been ill of ascites and anasarca for four years. He was put on a course of cream of tartar, in the usual manner, Feb. 16th, 1795. On the 9th of March, it was encreased to six drachms; his swellings were then abating. On the 19th it was augmented to an ounce. April 6th, he was nearly well.

HIST. XXXIII.

Ellen Green, aged eighteen, had ascites, and incipient anasarca, of a month's standing. She began a course of cream of tartar, March 2, 1795; it was augmented to six drachms, afterwards to an ounce a-day. April 6th, her swellings were removed.

DIGITALIS.

HIST. XXXIV.

Sarah Duxbury, aged eighteen, had been ill of anasarca for some time before she came under my care, Dec. 19, 1791. She was ordered a grain of digitalis daily. Her urine was soon encreased, and she was cured in the beginning of Feburary. This was a slight case.

HIST. XXXV.

Ann Brown, aged sixty-nine, was admitted April 11th, 1792, with ascites and anasarca of a month's

a month's standing. She had a severe diarrhœa, which prevented me from using cream of tartar. I ordered her a grain of digitalis in a draught, with a dose of spiritus ætheris vitriolici, and twenty drops of laudanum. Next day the digitalis was continued. Her urine was encreased: On the 13th the urine was passed in a quantity three times larger than before, and the diarrhœa was stopt. But an unfavourable change soon took place. On the 19th her diarrhœa returned, and the swellings were stationary; on the 21st they encreased, and she continued to swell more till the 29th. Early on the 2d of May, she died, and was inspected in the afternoon. When the body was opened, we found a good deal of water effused in the abdomen. The liver was not more than half the natural size, scirrhous, and full of tubercles. The pancreas was much indurated and diseased: the spleen was enlarged. The caput cæcum coli appeared diseased, and full of tubercles. The jejunum was inflamed, for an extent of several inches. There were adhesions between the rectum,

rectum, and the posterior part of the uterus. The ovaria were small and hard.

In the thorax, there was an effusion of water on the right side, and there were adhesions, and a slight effusion on the left. There was some water in the pericardium. The heart and lungs were sound.

HIST. XXXVI.

Peter Lomax, aged twenty-one, pale and much emaciated, came under my care for ascites, and vomiting of blood, Feb. 10, 1794. He had been ill upwards of a year. He took digitalis in encreasing doses, till he reached the quantity of a grain four times a-day. April 7th, his swelling was decreased, and the hæmorrhage was entirely suppressed. After this time, his complaint became stationary, and he complained of violent palpitations of the heart. On examining his breast, there was an evident extension of the pulsation of the heart, across the thorax. It was so distinctly marked, in this extenuated subject, as

to

to impress a forcible belief that the right auricle was considerably dilated. In September, the swelling of the abdomen was reduced by a spontaneous diarrhœa, but the hæmorrhage frequently returned, and he had bloody stools. Digitalis, opium, and wine afforded no relief. He died soon after, and I was refused permission to inspect the body.

HIST. XXXVII.

John Jones, admitted Oct. 1792, of a cachectic appearance, pale, and extenuated, had anasarca and ascites in a considerable degree. He took digitalis without relief, but it was difficult to ascertain the effect of his medicines, as he laboured under a constant, slight delirium. He died in a few weeks. When the body was opened, we found water effused in the thorax and abdomen, but no other particular appearance, the viscera being perfectly sound.

BACHER'S TONIC PILLS.

HIST. XXXVIII.

William Exell, admitted Nov. 17, 1793, after a tedious fever, was attacked by ascites and anasarca. As there was reason to suspect obstruction of the liver, I put him on a course of calomel, but could not remove the swellings by it, though his mouth was affected. I then ordered him the tonic pills, which effected his cure, after he had persevered in their use for a considerable time. This was a very obstinate case.

HIST. XXXIX.

Henry Robinson, aged sixty-three, was admitted April 7th, 1792. He had ascites and anasarca, with a harassing cough. The backs of his hands were greatly distended with water. I ordered him five grains of gamboge in a drachm of spiritus ætheris nitrosi. Next day he had three stools, and the swelling of the abdomen had decreased. He was then put

put on the use of cream of tartar. On the 10th he was no better; the gamboge draught was repeated. On the 11th, he had nine stools, and the abdomen had decreased five inches over night. This morning it had swelled again. April 12th, he had several stools, and the abdomen decreased three inches. I thought this a favourable time to order digitalis, and he began to take it this day: 13th, he had decreased another inch; the dose of digitalis was augmented to two grains a-day. April 19th, no progress had been made: the tonic pills were now directed; he took nine a-day. 21st, abdomen decreased two inches; respiration easier; six stools since the preceding day. The pills were continued. 25th, the size of the abdomen was much lessened, but the anasarca was encreasing; it rose upon the chest, and swelled him to the points of his fingers. 28th, the abdomen is completely reduced to a natural size, but the anasarca extends upwards. I ordered a small blister to be applied to the middle of the breast. May 1st, the draining

ing of the blister continued. 5th, had six watery stools, passed more urine, and the anasarca diminished in fullness. 7th and 8th, the anasarca was encreased again: another blister was applied. May 9th, he was seized with a vomiting of blood, and expired.

HIST. XL.

Mary Adshead, aged thirty-one, admitted Sept. 16, 1794, ill of ascites, took cream of tartar without relief. She was then ordered the tonic pills, and persevered in using them for some time, but deriving no advantage from them, she discontinued her attendance.

MERCURY.

HIST. XLI.

Ann Hassel, aged seven, was admitted Feb. 27, 1792, ill of ascites. She was ordered to rub in a drachm of the unguentum cæruleum fortius, twice a week, and to take about twenty drops of the spiritus ætheris vitriolici four times a-day. On the 8th of March,

her swelling was diminishing, and she passed more urine; on the 19th, the swelling was gone, and she was discharged cured.

HIST. XLII.

J. Kearsley, aged sixty-four, was admitted about the end of April, 1792, with ascites. He was a thin, infirm old man. I directed the mercurial friction, and spiritus ætheris vitrolici. April 30th, the swelling was less, and his urine encreased. June 1, the flow of urine was so constant, that he complained of it. The friction was interrupted. His legs now swelled, but the abdomen was nearly of its natural size. June 12, every appearance of dropsy was removed, but he remained feeble. He was ordered tonic medicines, and was soon after dismissed cured.

HIST. XLIII.

Mary Tattersall, aged twenty-three, was attacked by ascites, after being severely bruised in the abdomen, and both sides. She was prodigiously distended, and complained of

of violent pain in her left side, but her countenance was natural, and her strength pretty entire. Some of the common diuretics were given, without effect, and it became necessary to employ the operation, by which eighteen quarts of water were drawn off. When the swelling was thus reduced, the state of the viscera seemed to be alarming: there was great fulness and hardness in the region of the liver on the right, and of the spleen on the left side. I therefore judged it necessary to direct the mercurial friction, which was continued till her mouth was made very sore, when various diuretics were given, without encreasing her urine. She became again so much distended, that we had recourse to another puncture; seventeen quarts of water were now drawn off. On the diminution of the swelling, the liver felt smaller and softer. At a third tapping, seventeen quarts were again evacuated; at a fourth, ten quarts. Finding no relief from any method employed, she then left the house, and went to a distant part of the country.

HIST.

HIST. XLIV.

Valentine Ramsden, aged forty-seven, admitted June 20th, 1794, had ascites and anasarca to a very considerable degree. He was emaciated and weak, with a yellow suffusion over the whole skin; a considerable time before he became dropsical, he had sustained a severe injury on the right side, in the region of the liver, since which he had frequent pains in that place, sometimes shooting up to the right shoulder. He had a harassing cough, and copious spitting. After some ineffectual trials of cream of tartar and digitalis, I made him use the mercurial friction, and *spiritus ætheris vitriolici*. About the beginning of the course, the skin of one leg gave way, and discharged a great quantity of water. The friction was continued, till his mouth became very sore, with the effect of diminishing the swellings *. When it was necessary

* At two different times, he threw up large quantities of water, which had a temporary effect in lessening his size.

necessary to omit the mercury, I put him on a course of digitalis, supporting his strength with wine, and occasionally opening his bowels with gamboge and calomel. He continued in a languishing state, and upon the healing of his mouth, the swellings appeared at a stand, and even seemed to encrease. I then omitted the digitalis, and ordered him a preparation of the bark, with tincture of cantharides, in the proportion of a drachm to eight ounces: to this was occasionally added a drachm of oxymel of squills. Under this course his urine encreased, and about the middle of December, his swellings were entirely removed, but he was reduced to the lowest degree of weakness. His leg still continued to discharge a mixture of pus and serum.

He died from mere debility, in the end of December.

HIST. XLV.

William Edwards, aged thirty, was admitted

ted Oct. 1792, with ascites and anasarca; his face, and the backs of his hands were very much swelled. He took cream of tartar for some time, without effect; afterwards he took squills in substance, and swelled more. He then had draughts with gamboge and calomel, and the use of the latter was pushed, as the swelling went on rapidly, so as to affect his mouth in the course of a week. The spiritus ætheris vitriolici was then added to the course. On the 14th of November, the swellings were not decreased, but his mouth was still sore. I ordered him half a drachm of Dover's powder, at bed-time, which he rejected; however, he sweated considerably, and two days after, passed a good deal of water, with the effect of lessening the swellings. His cough now became troublesome, and he complained of general pains: he was ordered a dose of the diaphoretic mixture, (antimonial wine with laudanum) every night at bed-time. On the 23d Nov. the report is, "swellings almost gone." A

pneumonic

pneumonic affection supervened, and carried him off.

BARK, WITH TINCTURE OF CANTHARIDES.

HIST. XLVI.

Henry Kay, aged eleven years, after recovering from the scarlatina anginosa, became affected with general dropsy. He was ordered a mixture with bark, and tincture of cantharides, and recovered in the course of a month. There was reason to fear, at one period of his disorder, that effusion had happened in the brain, for he was seized with epileptic fits, to which he had never before been subject, and after the cessation of the fits appeared comatose. In this emergency, his temples were blistered.

HIST. XLVII.

Evan Ellis, aged eight years, was seized with anasarca and ascites, after an attack of the scarlatina anginosa. He took the bark mixture,

mixture, with tincture of cantharides, and was cured in the space of three weeks.

HIST. XLVIII.

James Shaw, aged six years, had ascites and anasarca, after the scarlatina anginosa. He recovered by the same method, in a few weeks.

HIST. XLIX.

Mary Hulse, aged twenty-six, after a tedious, irregular fever, which had been attended with pneumonic, and sometimes with hysterical symptoms, became anasarcous. She took the bark mixture, with tincture of cantharides, and sometimes with the addition of some oxymel of squills. She recovered in a short time.

NICOTIANA.

HIST. L.

Thomas Brickhill, aged forty-five, after a long series of pneumonic and dyspeptic complaints,

plaints, became generally dropsical. From the degree of orthopnœa and cough under which he laboured, there was even reason to suppose that effusion had taken place in the chest. He was put upon a course of cream of tartar, afterwards of digitalis, with occasional doses of gamboge and jallap, without obtaining any relief. As his swellings became very great, and his complaints extremely distressing, I ordered him to use the tinctura nicotianæ in small doses. This produced an immediate encrease of urine. It was therefore pushed to the dose of twenty drops, four times a-day. The swellings now decreased very slowly, and though he used tonics, his stomach was sometimes unable to retain the full dose of the tincture; it was therefore varied, according to circumstances. He persevered in the use of the remedy for several months, till a complete cure was obtained.

GAMBOGE.

GAMBOGE.

HIST. LI.

J. Edwards, was admitted March 19th, 1792, ill of ascites and anasarca. He was directed to take five grains of gamboge, with two drachms of spiritus ætheris vitriolici, in a draught, twice or thrice a week, according to its operation. This composition acted as a gentle purgative, encreased his urine, and cured him in a few weeks.

HIST. LII.

Ann Calvert, about thirty years of age, complained of great dyspnœa, dry cough, and pain of her breast. Respiration was stridulous, and her pulse frequent. Dec. 3, 1794, I directed her to lose ten ounces of blood, and to take the laxative pectoral electuary. On the 9th, the dyspnœa and pain, though easier, being still considerable, a blister was applied to her breast. Three days afterwards, the bleeding was repeated, and she was blistered

tered between the shoulders. On the 9th of January, her feet and abdomen began to swell, and her urine became deficient; she was then put on a course of cream of tartar, which was continued without relief, till the 27th of March. She was then ordered to lose nine ounces of blood, and to take the infusum digitalis, in encreasing doses. This was continued, to no purpose, till the 24th of April, when the course was changed to the following bolus.

> ℞ Pulv. Scill. Arid. gr. iij.
> Calomelan: gr. j.
> Sapon. Hispan. gr. x.
> Syrup. q. s. ut f. Bolus, omni nocte, hora somni, sumendus.

She was now so much disposed to costiveness, that it was necessary to augment the calomel to four grains in each bolus. She was discouraged by experiencing no relief, and attended with no great regularity, till the 4th of September, when the boluses were discontinued, and she was put on a course of Bacher's tonic pills. On the 18th, the pills were encreased to twenty-one a-day, but she

was

was so far from being relieved, that it was necessary to bleed her again, on the 29th. Oct. 9th, she was more swelled: she now took thirty of the tonic pills daily. On the 27th, I directed three grains of squills, ten grains of nutmeg, and half a grain of opium, to be taken every night, continuing the tonic pills by day. Nov. 6th, no progress being made, I changed her medicines again, and determined to try the effect of digitalis in substance. It was pushed to the extent of four grains a-day, with a pint of the cerevisia diuretica. On the 20th, the swellings were lessened, but in a few days she grew worse again. She then took six grains a-day, and persisted, without farther relief, till the 4th Dec. 1794. I then ordered her five grains of gamboge, with a drachm of spiritus ætheris nitrosi, every night in a draught, and a mixture with spiritus ætheris vitriolici, by day. This course kept her bowels gently open, encreased her urine, and relieved her breathing in a remarkable degree. Dec. 18th, the swellings were falling; but a hard frost re-

newed

newed the dyspnœa on the 22d. Jan. 5, her swellings were nearly gone, but the dyspnœa was still considerable.

HIST. LIII.

Mary Hitchcock, aged forty-eight, had long been affected with general pains, incessant cough, with great expectoration, flatulence, and spasmodic affections of the bowels. These complaints terminated in ascites and anasarca. She took the tonic pills, with the occasional interposition of the gamboge draught, for a month; her swellings abated; but after another fortnight, they returned. She then took the decoction of golden-rod for a fortnight, during which her swellings again lessened, her urine was much encreased, her appetite improved, and her bowels were kept moderately open by the decoction. Costiveness and dysuria then came on, which were relieved by occasional doses of calomel; the swellings remained stationary, and the golden-rod was continued till our stock of it was exhausted. She was then put on a

course

course of gamboge with cream of tartar, which completed the cure in about a month. This patient was much debilitated, and appeared to be phthisical, before the accession of the dropsy.

CREAM OF TARTAR, WITH DIGITALIS.

HIST. LIV.

Thomas Bowker, an elderly man, accustomed to the abuse of spirituous liquors, came under my care for acute rheumatism, which was not accompanied with swellings of the joints. In the course of three weeks, the disease was converted to anasarca of the lower limbs, which encreased with such rapidity, that the integuments gave way on one foot, and a discharge of water took place. The abdomen was likewise beginning to fill. He now complained of a tormenting cough, and want of sleep. I ordered him cream of tartar, in the usual manner, every morning, and a grain of pulvis digitalis, with a grain of opium, every night at bed-time. In a few days,

days, his swellings were lessened, and all his complaints greatly relieved. During the severe frost of January and February, 1795, however, his strength sunk, and he died about the middle of February.

VIRGA AUREA.

HIST. LV.

I have mentioned, in *Mardley*'s case, the good effects of this plant, incidentally. The following is the only other instance of dropsy, in which I have been able to give it a fair trial.

Mary Brown, aged forty-nine, had been ill of ascites and anasarca for two months. After ineffectual attempts with some other diuretics, she was ordered the virga aurea in decoction, the plant being too fresh to be otherwise exhibited. In eight days, the abdomen decreased two inches, but constant sickness and vomiting came on, and it became necessary to omit the golden-rod. Imagining

ing that there was an effort of the constitution to terminate the disease by vomiting, as it sometimes happens, I directed three grains of squills every night. Brisk vomiting was excited, her urine encreased, and the abdomen fell an inch and half. This was the last period of success. Incessant vomiting continued, without farther diminution of the swellings, in spite of opiates. The mercurial friction was attempted, but notwithstanding every exertion, she became comatose, and expired.

HIST. LVI.

Alice Boardman, aged fifty, was ill of ascites; she had been tapped, and when I saw her was suffering so much pain from the distention of the abdomen, that it was necessary to repeat the operation. Nine quarts of water were drawn off. After a short, ineffectual trial of digitalis, I put her on a course of cream of tartar, by which her size was lessened, and continued to be reduced during a fortnight. It ceased at length to purge her, and

and gamboge was interposed. But finding, after a week's farther trial, that the cream of tartar had lost its effect, though given in encreased doses, I dropt it, and directed a course of calomel with squills. This seemed at first to have some effect, but soon lost its power. The tonic pills, and afterwards mercurial friction, were employed with no better success. She died, two months after admission.

On reviewing the events of these cases, the preference I had determined to give the cream of tartar, in dropsical diseases, appears fully justified. Of thirty-three cases in which I have used this remedy, since the publication of my former volume, twenty-four have been cured, and two relieved: of the number cured, two were cases of hydrothorax, fifteen were the most dangerous complications of dropsy, five were cases of ascites alone; the rest of anasarca. I have purposely omitted several slight cases, and on the contrary, I have excluded other cases, where the

imminent hazard of the patient's life afforded no time for the fair trial of medicines. The digitalis appears, in this set of cases, to great disadvantage indeed; but I confess, that my attention has been diverted from it, by my success with cream of tartar, a remedy liable to no bad consequences, from indiscretion either of the practitioner, or the patient. I am of opinion, however, that the employment of digitalis, as a secondary remedy, of which *Bowkers*'s case is an example, may be attended with the best effects, and it cannot be denied, that sometimes, as in HIST. VIII, digitalis will succeed when other remedies have failed; but this happens with many other diuretics.

To arrive at more just conclusions, it will be proper to compare the result of all the cases of dropsy, mentioned in these volumes.

Cream of tartar has been given in forty-three cases; of these, thirty-three have recovered*; nine

* Three patients, marked as convalescents in the former volume, were completely cured.

nine have died; three have been relieved.

Digitalis has been given in twenty-nine cases, of which eleven were cured; seven died; two were relieved; nine were not relieved.

The tonic pills have been given in twelve cases, of which six were cured; three died; two were greatly relieved; another received no benefit.

The bark, with tincture of cantharides, cured four cases of dropsy from conversion, and relieved *Ramsden* more than any other remedy had done.

The cases of *Coxe*, and *Mary Smith*, afford two rare instances of the beneficial effects of mercurial friction, joined with a diuretic, in dropsy of the ovarium.

The other remedies were given in too small a number of cases, to justify any general conclusion.

It

It appears evidently, from this comparison, that the greatest proportion of cures, out of an hundred and three cases, has been incontestably effected by cream of tartar.

That digitalis has produced a smaller number of cures, in proportion, than any other medicine employed.

That it is useful, in some habits, to exchange the employment of cream of tartar, for that of digitalis; or perhaps more frequently to unite their action, by exhibiting digitalis in the evening, when the purgative operation of cream of tartar, for the day, is exhausted.

That the employment, and especially the repetition of tapping, tends to accelerate the subsequent accumulation in ascites.

That in exhausted dropsical habits, where there is no permanent obstruction of the viscera, or where such an obstruction has been removed

removed by other remedies, tonics may be advantageously joined with stimulating diuretics.

That the free, and long-continued use of mercury, sometimes brings on a depression of strength, and irritability of the bowels, from which it is difficult to recover the patient.

Lastly, that when diuretics act successfully, they in most cases operate early. Hence the advantage of exchanging diuretics, at the beginning of the disease. It appears, likewise, from some of these cases, that the employment of a diuretic, which had failed at the commencement, may be resumed at a subsequent period of the disorder, with success *.

The power of cream of tartar, in curing hydrothorax, is completely established, by two cases in this volume, those of *Bradshaw* and *Newton*, (HIST. I, and VII,) added to those of *Farrer*, *Bayley*, and *Monk*, in the former.

Bradshaw

* Hist XX, of this volume.

Bradshaw relapsed twice, and *Monk* once, but both were cured by repeating their medicines. My observations thus support the opinion, delivered by some judicious authors, that hydrothorax alone is not an intractable species of dropsy.

In HIST. XXIII, of this volume, a remarkable instance appears of the hydragogue power of cream of tartar, even when it exerted no other sensible effect on the system.

The greatest inconvenience which I have experienced, in using this medicine, is, that in some habits it soon loses its purgative effect, and with that its hydragogue power. It then becomes necessary to give it in doses so bulky, that they are apt to offend the stomach. This might be avoided, by quickening it occasionally by the addition of a little gamboge. Formerly, it was supposed that the occurrence of a diarrhœa checked the flow of urine; in the action of cream of tar-

tar, I have had frequent proofs of the fallacy of this remark. The patients themselves have often observed, that the swellings abated, and the urine flowed more largely, as they were more briskly purged by that remedy. Even digitalis sometimes purges, during a successful exhibition. In the case of *Dewrden*, (vol. 1,) and in another, of which I have preserved no other particulars, the action of digitalis supported a gentle diarrhœa, through the whole progress of the cure.

It appears, from HIST. XXXVIII, of this volume, that when ascites and anasarca are complicated, in debilitated habits, the anasarca sometimes gains upon the trunk of the body, while the ascites is lessening by proper remedies. From the same case, and from HIST. XVI, it also appears, that high, puffy swellings, on the backs of the hands, are dangerous signs, in such complications.

The golden-rod, anciently of great fame in nephritic and dropsical disorders, operates, in the

the dose of half a drachm of the dried powder, given three times a-day, as a gentle purgative, but does not prove very diuretic (HIST. XX, XLVIII, and LV.). I may be allowed to mention here, that I have used it in several nephritic cases with success, in that dose. It is much more mucilaginous than the uva ursi, and is an agreeable bitter, with little or no astringency. BARCLAY has given a description of this plant in his *Satyricon*, which proves, that if botanical Latin is sometimes barbarous, or inelegant, the fault does not arise from the nature of the subject.

" Hæc lanceatis foliis, piloque ita brevi, " ut pene curiosos oculos fallat, crenis deni- " que tenuibus, et sæpe in obtusam speciem " oras secantibus, mediocriter assurgit. Ra- " dix caulisque lignea, subtiliorem succum in " herbam transferunt. Planta ad ingenium " terræ nunc cubitalis, plerumque eminen- " tior; insigne fastigium floribus ad examen " turgentibus cingit, & VIRGÆ AUREÆ sortita " est nomen, sive quod aureæ ac pene divi-

" næ

"næ virtutis est, sive quod præstantis metalli "colorem exigui floris venustas æmulatur. "Cæterum contusum in renibus calculum in "innoxium pulverem solvit. Non in latere, "non in vesica dolor: adeo ut tam facili re-"medio pudeat calculum timuisse."—This eulogium, it must be owned, is a little rhetorical. The virga aurea is, indeed, an useful remedy in nephritis, but not more so than the uva ursi, or perhaps than many other bitters. I have always used it without opium.

In HIST. XLII, the diuretic effect of mercurial friction, joined with spiritus ætheris vitriolici, was so powerful, as to produce a constant flow, amounting to an incontinence of urine, in a very old, and much enfeebled subject. The inconvenience was, in that case, removed by tonics: I have found it, in a smaller degree, produced by other combinations of diuretics, in old persons, but I do not remember to have seen it troublesome, excepting in cases where mercury had been freely used.

Upon

Upon the whole, I think, we may conclude, that slow and gentle methods of treatment ought to be instituted, in all cases of dropsy in which the general habit is affected, either by visceral obstructions, or by the length of the disease. That from the junction of cream of tartar with digitalis, interposing purgatives occasionally, much may be hoped; and that mercury should be considered as a resource, only after the failure of milder remedies, which produce a less sudden, and less permanent impression on the constitution.

TABLE, shewing the Effects of Diuretics in fifty-six Cases of DROPSY.

	Name.	Age.	Species of Dropsy.	Remedies.	Event.
1	*Jos. Bradshaw*	47	Hydrothorax	Cream of Tartar	Cured.
2	*Magdalen Cross*	74	Anasarca	Cream of Tartar	Cured.
3	*John Beswick*	58	Anasarca	Cream of Tarrar	Cured.
4	*Joseph Wilcock*	37	Anasarca	Cream of Tartar	Cured.
5	*John Clough*	50	Anasarca	Cream of Tartar	Cured.
6	*John Birch*	25	Ascites and Anasarca	Cream of Tartar	Cured.
7	*Mary Newton*	35	Hydrothorax	Cream of Tartar	Cured.
8	*A. F.*	60	Ascites, Anasarca, and Hydrothorax	First Course, Cream of Tartar	Relieved.
				Second Course, Digitalis	Cured.
9	*Eliz. Wells*	58	Ascites and Anasarca	Cream of Tartar	Died.
10	*Mary Williams*	2	Ascites and Anasarca	Cream of Tartar	Cured.
11	*Ann Lees*	30	Ascites	Cream of Tartar	Cured.
12	*John Roberts*	50	Ascites and Anasarca	Cream of Tartar	Cured.
13	*John Campain*	25	Anasarca	Cream of Tartar	Cured.
14	*John Taylor*	30	Ascites and Anasarca	Cream of Tartar	Cured.
15	*Mary Leech*	48	Ascites and Anasarca	First Course, Mercurial Friction, with Spiritus Ætheris Vitrio-lici	Not relieved.
				Second Course, Gamboge, with Cream of Tartar	Died, after the remov-al of the swellings.

	Name.	Age.	Species of Dropsy.	Remedies.	Event.
16	*Frances Clough*	74	Ascites, Anasarca, and Hydrothorax	Cream of Tartar, Gamboge, with Sp. Ætheris Nitrosi	Died.
17	*Mary Thompson*	30	Ascites	Cream of Tartar	Cured.
18	*Mary Smith*	42	Ascites and Hydrops Ovarii	First Course, Mercurial Frictions, with Sp. Æther. Vitriolici	Hydr. Ovarii relieved. Ascites, not relieved.
				Second Course, Cream of Tartar	Cured.
19	*Peter Morgan*		Ascites and Anasarca	Cream of Tartar	Relieved.
20	*John Mardley*	60	Ascites and Anasarca	First Course, Cream of Tartar	Not relieved.
				Second Course, Virga Aurea	Relieved.
				Third Course, C. of Tartar again	Cured.
21	*Sarah Hughes*	50	Ascites	Cream of Tartar	Cured.
22	*George Musgrave*	30	Ascites and Anasarca	Cream of Tartar	Cured.
				Relapsed, Gamboge	Died.
23	*Mr. T.*	50	Ascites and Anasarca	Cream of Tartar	Cured.
24	*William Bradley*	8	Ascites and Anasarca	Cream of Tartar	Cured.
25	*George Adams*	1¾	Ascites	Cream of Tartar	Died.
26	*Ruth Ratcliff*	25	Ascites and Anasarca	Cream of Tartar	Cured.
27	*John Wood*	45	Ascites and Anasarca	Cream of Tartar	Cured.
28	*Wm. Winterburn*	58	Ascites and Anasarca	Cream of Tartar	Cured.
29	*Mary Byrom*	43	Ascites	First Course, Cream of Tartar	Relieved.
				Second Course, Tonic Pills	Cured.

	Name.	Age.	Species of Dropsy.	Remedies.	Event.
30	*Mary Bury*	9	Ascites	Cream of Tartar	Died.
31	*Martha Yates*	23	Ascites and Anasarca	Cm. of Tart. Mercury. Puncture.	Died.
32	*Robert Berry*	45	Anasarca and Ascites	Cream of Tartar	Cured.
33	*Ellen Green*	18	Ascites and Anasarca	Cream of Tartar	Cured.
34	*Sarah Duxbury*	18	Anasarca	Digitalis	Cured.
35	*Ann Brown*	69	Ascites and Anasarca	Digitalis	Died.
36	*Peter Lomax*	21	Ascites. Dilated Heart	Digitalis	Died.
37	*John Jones*	48	Ascites and Anasarca	Digitalis	Died.
38	*William Exell*		Ascites and Anasarca	Tonic Pills	Cured.
39	*Henry Robinson*	63	Ascites and Anasarca	First Course, Digitalis. Second Course, Tonic Pills	Died.
40	*Mary Adshead*		Ascites	First Course, Cream of Tartar. Second Course, Tonic Pills	Not relieved.
41	*Ann Hassel*	7	Ascites	Mercurial Friction and Sp. Æther. Vitriolici	Cured.
42	*John Kearsley*	64	Ascites	Mercurial Friction and Sp. Æther. Vitriolici	Cured.
43	*Mary Tattersall*	23	Ascites	Mercurial Friction. Puncture.	Not relieved.
44	*Valentine Ramsden*	47	Ascites and Anasarca	Mercurial Friction. Digitalis. Bark with Tinct. Cantharid.	Died, after the removal of the swellings.
45	*William Edwards*		Ascites and Anasarca	Calomel. Dover's Powder	Died, after the removal of the swellings.

	Name.	Age.	Species of Dropsy.	Remedies.	Event.
46	*Henry Kay*	11	Ascites and Anasarca	Bark with Tinctur. Cantharid.	Cured.
47	*Evan Ellis*	8	Ascites and Anasarca	Bark with Tinct. Canthar.	Cured.
48	*James Shaw*	6	Ascites and Anasarca	Bark with Tinct. Canthar.	Cured.
49	*Mary Hulse*	30	Anasarca	Bark with Tinct. Canthar.	Cured.
50	*Thomas Brickhill*	45	Ascites, Anasarca, and Hydrothorax	Tinctura Nicotianæ	Cured.
51	*J. Edwards*		Ascites and Anasarca	Gamboge with Sp. Æth.	Cured.
52	*Ann Calvert*	30	Ascites, Anasarca, and Hydrothorax	First Course, Cream of Tartar Sec. Course, Infusion, Digit. Third Course, Cal. with Squills Fourth Course, Tonic Pills Fifth Course, Digitalis in Subst.	Not relieved.
				Sixth Course, Gamboge with Sp. Æther. Vitriol.	Relieved.
53	*Mary Hitchcock*	48	Ascites and Anasarca	First Course, Tonic Pills	Not relieved.
				Second Course, Virga Aurea	Relieved.
				Third Course, Gamboge with Cream of Tartar	Cured.
54	*Thomas Bowker*	56	Anasarca	Digitalis and Cream of Tartar	Died.
55	*Mary Brown*	49	Ascites and Anasarca	Virga Aurea. Squills	Died.
56	*Alice Boardman*	50	Ascites	Digitalis. Cream of Tartar. Gamboge. Squills. Tonic Pills. Mercurial Friction	Died.

OF THE

PREVENTION OF FEVERS

in

GREAT TOWNS.

——— *semper novis*
Deflenda lacrymis funera, ac populi struem.
Senec. Œdip.

OF THE PREVENTION OF FEVERS IN GREAT TOWNS.

The prevalence of fevers, in large manufacturing towns, has appeared to me, from personal observation, to be encreased by several causes, the action of which might be weakened by proper care. To these causes I endeavoured to direct the public attention in my last volume; and as my observations chiefly referred to this town, I pointed out the dangerous situation of the poor, to the more opulent inhabitants, in a separate publication, which I shall insert below.

Address to the Committee of Police.

"Among the objects which engage the attention of this Committee, there can be none more interesting, than the prevention of epidemic diseases among the poor, as far as it

can be accomplished by attending to the most hazardous circumstances of their situation. I hope I shall therefore be excused, for offering a few observations, on the means of opposing the production and progress of infectious fevers, in cellars and lodging-houses, where they reduce great numbers of the industrious poor to extreme distress, and often nearly destroy whole families. In doing this, I shall confine myself to the remarks which have occurred to me, in the discharge of my office of Physician to the Infirmary, as local observations only can be interesting to the Committee."

"1. In some parts of the town, cellars are so damp as to be unfit for habitations; such places should be reported to the Commissioners, by whom proper representations may be made to the owners, that the cellars may be appropriated to other purposes. I have known several industrious families lost to the community, by a short residence in damp cellars."

2. The

"2. The poor often suffer much, from the shattered state of cellar windows. This is a trifling circumstance in appearance, but the consequences to the inhabitants are of the most serious kind. Fevers are among the most usual effects; and I have often met with consumptions which could be traced to this cause. Inveterate rheumatic complaints, which disable the sufferer from every kind of employment, are often produced in the same manner. This source of disease may be expected to admit of easy removal, for it cannot be the interest of the proprietor of a cellar to have his tenants constantly sick."

"I have seen large apertures in the walls of a lodging-house, in consequence of which, a patient of mine contracted a consumption; the owner was applied to, in a cold, rainy season, to close the openings, so as to mitigate the patient's sufferings from the severity of the weather; but in vain."

[A great proportion of the aged poor die

die of pneumonic complaints and dropsy.]

"3. I am persuaded, that mischief frequently arises, from a practice common in many narrow back streets, of leaving the vaults of the privies open. I have often observed, that fevers prevail most, in houses exposed to the effluvia of dunghills in such situations."

[During the late epidemic, it was observed that the fever prevailed most, in streets which were not drained, or in which dunghills were suffered to accumulate, or where the blood and garbage from slaughter-houses were allowed to stagnate. I do not mean to assert, that such nuisances produce the disease, but they appear to assist its progress, and to operate as remote causes of fever, in whatever manner pathologists may choose to explain their action.]

"As an example of the injurious effect of these circumstances, I beg leave to point out one

one family, of the name of Turner, in a dark cellar behind Jackson's-row. They have been almost constantly patients of the infirmary for three years past, on account of disorders owing to their miserable dwelling. There are other instances of the same kind in Bootle-street; in one house of the latter street, most of the inhabitants are paralytic, in consequence of their situation in a blind alley, which excludes them from light and air. Consumptions, distortion, and idiocy, are common in such recesses."

"4. In Blakeley-street, under No. 4, is a range of cellars, let out to lodgers, which threatens to become a nursery of diseases. They consist of four rooms, communicating with each other, of which the two centre rooms are completely dark; the fourth is very ill lighted, and chiefly ventilated through the others. They contain from four to five beds in each, and are already extremely dirty."

[A large

[A large house, in an airy situation, the remains of an abortive design for a poor-house, has been filled with fever-patients, by the admission of fresh air being obstructed. A considerable number of poor families had been lodged in it, for very trifling rents; the building had never been completed, and quickly went to decay. Many of the windows, and the principal entrance were built up, and the fever then became universal in it.]

" 5. The lodging-houses, near the extremities of the town, produce many fevers, not only by want of cleanliness and air, but by receiving the most offensive objects, into beds, which never seem to undergo any attempt towards cleaning them, from their first purchase till they rot under their tenants. The most fatal consequences have resulted from a nest of lodging-houses in Brooks's-entry, near the bottom of Long-mill-gate, a place which I beg leave to recommend to the serious attention of the committee. In those houses

houses, a very dangerous fever constantly subsists, and has subsisted for a considerable number of years. I have known nine patients confined in fevers at the same time, in one of those houses, and crammed into three small, dirty rooms, without the regular attendance of any friend, or of a nurse. Four of these poor creatures died, absolutely from want of the common offices of humanity, and neglect in the administration of their medicines. In some other houses in the same nest, I have known a whole swarm of lodgers exposed to infection by the introduction of a fever patient, yet so far infatuated, as to refuse to quit the house, till all of them have been seized with the disorder. It must be observed, that persons newly arrived from the country are most liable to suffer from these causes, and as they are often taken ill within a few days after entering an infected house, there arises a double injury to the town, from the loss of their labour, and the expence of supporting them in their illness. A great number of the home-patients of the Infirmary

are

are of this description. The horror of those houses cannot easily be described; a lodger fresh from the country often lies down in a bed, filled with infection by its last tenant, or from which the corpse of a victim to fever has only been removed a few hours before."

"Another set of lodging-houses constantly infected, is known by the name of the Five Houses in Newton-street. The continuance of fevers among them seems to arise from their being over crouded, and very dirty."

"6. The best method, perhaps, of giving an effectual check to these evils, would be to oblige all persons letting lodgings to take a licence, and to limit them in the number of their lodgers. By the terms of the licence, they might also be obliged to white-wash their houses twice a year, which is a powerful method of preventing infection. When a fever appears in a house full of lodgers, all who are uninfected should be immediately removed to a clean house, and their clothes should

should be washed and scoured. When the fever has ceased, the bed-clothes and curtains of the infected room ought to be scoured, or otherwise cleaned, and a fresh application of white-washing should be made. With proper care, indeed, the worst kind of fever may be confined to the patient's room, without danger to the rest of the family; but no dependance can be placed on the conduct of the persons to whom I allude."

"When the sick are destitute of beds, they should be supplied by the town. It is obvious, that fevers, slight in their commencement, must be greatly aggravated, and must often become dangerous, when the patient lies on a few rags, in a cold garret, or damp cellar."

[When the late epidemic was at its height, a subscription was begun for supplying the sick poor with beds, clothing, nurses, and food. With much benefit, considerable abuses resulted from this plan, great numbers of the poor

poor applying to the Infirmary, under pretence of sickness, for the sole purpose of profiting by the subscription. It was therefore thought more adviseable to promote subscriptions for the relief of the poor in general; as exposure to hunger and cold had always preceded the fever, in those families where it proved most general, and most obstinate.]

"7. This plan would require the appointment of Inspectors of lodging-houses, whose business it would be to visit houses which should be reported to them as infected, either by the neighbours, or by any medical gentleman, under whose observation such places should fall. They should be empowered to take proper steps for checking infection wherever it appears, and occasional enquiries might be made, respecting the compliance of persons letting lodgings with the condition of their licences. This would answer a very desirable purpose respecting the police, independent of the advantages proposed regarding health.

health. The keepers of the lodging-houses might be required to give an account of the name and occupation of every lodger whom they receive, and to become responsible, to a certain degree, for the truth of these reports. By this means, a constant check might be maintained on houses, which at present are the refuge of the most profligate and dangerous part of society."

"8. There is a practice, very common in small new buildings, which ought to be discouraged; that of putting up fixed casements. Some part, if not the whole of the window should always be moveable, especially where there is but a single window in the room. From the want of such a regulation, I have been often obliged to order several panes to be taken out of the window of a fever-room, to obtain a tolerable degree of ventilation."

"9. It is sometimes difficult to prevent the master of a lodging-house from turning a patient

tient out of doors, in the height of a fever, when he apprehends that his other lodgers will desert him. Some interposition of authority should take place, in such cases, both for the sake of humanity, and to prevent the unfortunate patient from spreading the disease into a fresh house."

"10. When a house is infected in every room, a nurse should be provided, on whom dependence can be placed, to prevent unnecessary visits from neighbours and acquaintances. About two years ago, a fever of the worst kind was carried from a lodging-house, in Salford, where it had attacked all the inhabitants, to another in Milk-street, near the Infirmary, where it seized several persons, in consequence of a thoughtless visit, made by an acquaintance lodging in Milk-street. In this way, fevers are sometimes introduced among the servants in opulent families."

[Another common mode of propagating

contagion,

contagion, is the sale of infected clothes, from houses where the fever has run through all the inhabitants. The Committee for the general relief of the poor, have very properly directed their visitors, to see all infected rags burnt, when they supply poor families with fresh clothing.]

"11. The prevalence of fevers, among persons employed in cotton mills, might be lessened, by an attention on the part of the overseers, to the following circumstances, besides a due regard to ventilation. Personal cleanliness should be strongly recommended and encouraged; and the parents of children so employed, should be enjoined to wash them every morning and evening, to keep their shoes and stockings in good condition, and above all never to send them to work early in the morning without giving them food."

"It is greatly to be wished, that the custom of working all night could be avoided. The continuance of such a practice cannot be consistent

consistent with health, and I am glad to find that it does not prevail universally."

"Great benefit would be derived, in such situations, from cold bathing, if the poor could be induced to use it once or twice a week, during the whole year. It would counteract the bad consequences of the want of clothing, on the change of which health is known so much to depend; and it would lessen the frequency of rheumatic complaints, by inuring those whose situations expose them the most, to the vicissitudes of the seasons, or sudden alterations of temperature. This would be best done by furnishing public baths for their use."

"Many other circumstances might be pointed out, which are of great importance in preserving the health of the poor, but I am afraid of intruding too much on the patience of the Committee. As the circumstances to which I have adverted, have been impressed on my mind by repeated, actual observations, and

as the evils they produce are of the most serious and alarming nature, I should have deemed myself wanting in my duty to the public, if I had omitted to lay these reflections before the gentlemen of the Committee, at a time when they are occupied with plans of public utility. If their attention should be thus excited, to a subject so important to the general good, my design will be fully answered."

A committee was at that time appointed, for regulating the police of the towns of Manchester and Salford, and as they saw the magnitude of the evils displayed, and entered with zeal into my views for their alleviation, there was reason to hope that beneficial measures would be pursued. Private interests, however, prevailed over those of the public, and nothing effectual was done. The years 1792 and 1793 passed over, without any extraordinary encrease of fever-patients, though the noxious effects of the nuisances I had mentioned were always apparent. But in the summer

summer and autumn of 1794, the usual epidemic fever became very prevalent among the poor, in some quarters of the town, particularly after a bilious cholic had raged among all ranks of people. To the ordinary causes of fever were now added, the influence of a burning summer, succeeded by very wet, but yet warm weather, and the want of clothing, and failure even of necessary food, in many families, occasioned by the decay of trade, and the great numbers of workmen enlisted in the army, who left their children to the slender support which could be earned by the labour of the mother. In many instances, I have found that for three or four days before the appearance of typhus in a family, consisting of several children, they had subsisted on little more than cold water. Many of those persons were strangers, and not entitled to, or unable to obtain the pittance afforded by the poor-laws. Even when that relief could be procured, it was very inadequate to the wants of a numerous family. Those who are accustomed to af-

fluence

fluence and ease, would shudder at the idea of supporting a sickly mother, encumbered with the charge of four or five infants, on an income of two shillings a week; this, however, is the parochial allowance in cases of illness. The pain and horror of these situations were often greatly aggravated, by the confinement of the patients in small, dark cellars, where five or six miserable creatures sometimes lay ill together, in the hottest weather; where the dead remained for whole days by the side of the survivors, and where delirium and insensibility were states to be envied.

In the months of November and December, an hundred and fifty-six patients in fevers sometimes applied weekly at the Infirmary, to be visited at their own houses, and though a severe frost took place in the end of December, yet the number of patients was not diminished towards the middle of January, 1795.

The influence of hard frost in abating fevers, cannot be immediately perceived. Many patients must have received the contagion, and others must feel the first symptoms of the disease, about the commencement of the frost: in these persons the disease must run its course. It is in the period of a fortnight or more, that the effect of the cold weather appears. This consideration accounts for the seemingly singular fact, that the epidemic fever of Philadelphia ceased in moderately warm weather.

The symptoms of this disease were nearly similar to those of the epidemic fever of 1790, 1791, which I have described elsewhere. In cases where early assistance was sought, and medicines and necessaries were supplied, this fever seldom proved fatal. During the continuance of the hot weather, indeed, I met with some cases, in which the type of typhus was assumed, as early as the fourth or fifth day, and a comatose state came on, which terminated in death.

This fever did not seem to be more contagious in its nature, than the cases which had been always occurring, though in smaller number, since the last epidemic. In 1792, I had two patients ill of typhus, in an infected lodging-house. I desired that they might be washed with cold water, and a healthy, ruddy young woman of the neighbourhood undertook the office. Though apparently in perfect health before she went into the sick chamber, she complained of the intolerable smell of the patients, and said she felt a head-ach, when she came down stairs. She sickened, and died of the fever, in three days.

About the same time, I met with a remarkable instance, of the ease with which contagion may be confined within certain bounds. A house, in a very confined situation, had been infected, during several years, in three of the rooms, and at one time, when the whole family was ill, four persons died from want of the common offices of a nurse. During all this time, an elderly couple, who lodged in the fourth

fourth room, separated from the infected only by the narrow staircase of the house, preserved themselves from the disorder, merely by avoiding all communication with the rest of the family.

Conversions to dropsy were much more common than usual, in this epidemic.

I met with several instances of the conversion of typhus to the scarlatina anginosa, and the contrary, in autumn, 1794. In such cases, dropsy supervened more early, and was more obstinate than usual.

As I had touched very slightly on the unhealthiness of cotton-mills, in the observations addressed to the Committee of Police, I shall add a few remarks on that subject.

Whether the infection of fever is ever generated in cotton-mills, has been disputed. Whatever may be said on that subject, there can be no doubt, that cotton-mills, as they are frequently

frequently managed at present, contribute powerfully to preserve and extend contagion. A great number of dirty people are confined together, during the best part of the day, in rooms, much warmer than the external atmosphere, into which little fresh air is admitted, and where the floors and the machinery are sometimes filthy beyond belief. The convalescents from infectious fevers are also admitted to resume their employment, without the use of any method, for purifying their clothes or persons from contagion: even those who retain their health, in infected houses, often carry a quantity of infection, attached to their clothes, into the working-rooms. The practice of working all night, still continued in some cotton-mills, must be added as a cause of fever. During the night, the persons employed are more solicitous to exclude the external air, while the atmosphere of the rooms is farther vitiated, by the number of candles. Watching is particularly severe, and prejudicial to children, at the early age when they begin to be employed in these works, nor is their

their repose rendered sufficiently comfortable. When their night-task is finished, they commonly lie down in beds, which have been just quitted by other children who labour during the day. This is, alone, a very noxious practice. But such is the natural appetite for fresh air, that many of these little creatures prefer rambling in the fields, during part of the time allotted to them for sleep.

I am happy to observe, that this cruel and injurious custom is now declining, and that in some extensive cotton-mills, it is entirely abolished; the proprietors justly conceiving, that there are sacrifices of health and life, for which no pecuniary advantage can compensate.

It must be observed, that the disadvantages of such works, result from inattention to cleanliness and ventilation, for there can be no reason why a cotton-mill should be particularly unhealthy; on the contrary, I am satisfied, from the experience of a friend, who has

has directed a large one for several years, that by frequently washing the floors and frames, and by admitting fresh air, a cotton-mill may be rendered as healthy as a private house.

There is, undoubtedly, considerable difficulty in preserving large rooms in a healthy state, where many persons are constantly confined, as we experience too much in hospitals. In cotton-mills, where they continue to work during the night, therefore, it can scarcely be expected, that the health of the labourers should be completely secured; but when the mill is empty, during the whole night, an opportunity is afforded for complete ventilation, and in such cases, the labourers, when kept tolerably clean, are perhaps less exposed to disease, than in their own habitations.

When we examine the history of some epidemics, of the plague of Marseilles, for example, or the late fever in Philadelphia, it appears that those disorders have grown by neglect,

neglect, and have disappeared before vigilance. While the ravages of contagion are confined to the more unprotected class of the poor, the opulent and the busy, far removed from the sight of misery, little suspect the horrors with which they are surrounded. Their attention, when at length rouzed, by the approach of danger to their own thresholds, often proves prejudicial at first, because it rises to alarm and panic. It is then, that fear, overpowering every principle, and every affection, prepares new dangers by the extravagant selfishness of its exertions.

The sick are sequestered from every means of relief, the dead are allowed to putrify in heaps, or are scarcely covered from the sight of the survivors, while the suspicion of infection, equivalent to a sentence of death, pursues every one, who has paid the coldest offices of charity to the sufferers. Under this dominion of inhumanity, destruction is carried to its utmost height, till the very extremity of danger excites men to counteract it. From the

the moment, that the sick are treated with kindness, instead of being avoided with horror; that houses are purified, instead of being shut up; and that the dead are interred at a sufficient depth, the pestilence, of whatever nature, begins to decline, and then gradually ceases. Less alarming epidemics may, therefore, be expected to admit of still speedier alleviation, when they do not depend upon imported contagion, but arise from such local wants and grievances, as have been specified in the preceding observations. Indeed I am persuaded, that the institution of a committee of health, in this, and similar towns, would be a measure of the greatest public utility, and well deserving the attention of the legislature, as the probable means of preserving many industrious families from destruction. If nothing more were done by such an institution, than to lighten the condition of the poor in its most urgent pressure, much good must still arise from it; but if ever the question of public health should be fully investigated, more important operations would appear

necessary

necessary than those which I have referred to.

It is obvious, that much sickness, among the poor, arises from errors, or defects in their lodgings and clothing. These mischiefs may be partially corrected, by occasional subscriptions, and the interference of the opulent in times of alarm and danger, but as soon as the hand of charity is withdrawn, the same evils recur.

The only method by which the poor could be provided with clean and healthy habitations, is the erection of public lodging-houses, on the plan of barracks, or caravanseras. Great numbers of the labouring poor, who are tempted, by the prospect of large wages, to flock into the principal manufacturing towns, become diseased, by getting into dirty, infected houses on their arrival. Others, from want of connections, waste their small stock of money, without procuring employment, and sink under the pressure of want and de-

spair.

spair. If those unfortunate persons had access, on their first arrival, to a public institution, where they could be lodged in clean, airy rooms, and where their residence would quickly become known, they would be saved, at once, from the danger of disease, and the hazard of ruinous idleness. The number of such victims, sacrificed to the present abuses, is incredible. Encouraged by the committee, a nicer regard to cleanliness might be introduced among the poor, they might, particularly, be induced to use the warm or cold bath, according to circumstances, a practice that would prevent many fevers, rheumatic and cutaneous disorders, and would promote an alertness and cheerfulness of mind, which would even improve them as workmen.

Other advantages, of a still more important nature, might be expected from such an institution. One of the strongest temptations to brutal debauchery, is the consciousness of being unnoticed, or contemned. In manufacturing towns, where the youth of both

sexes

sexes are early able to support themselves by their own labour, and where the nature of their employment produces a constant intercourse between them, licentiousness of manners is carried to the highest pitch. This may be fairly imputed, in great measure, to the unchecked, and disregarded state, in which persons of this class find themselves. For, whatever may be the practice of philosophers, men in general are little disposed to embrace virtue for her own sake, but in obeying her dictates, are apt to keep even her temporal rewards in view. Solitary self-denial, among the labouring poor, is commonly produced, I fear, by avarice. I am far from asserting, that the poor have no virtues; I am convinced that they possess many, by witnessing their conduct every day, in the most trying situations. But I apprehend, that by placing them in a more conspicuous point of view, according to the scheme proposed, where they would come under the inspection of a respectable public body, a powerful motive

tive would be added, to restrain the vicious, and to encourage the well-disposed.

By this means, the retreats of the thief, and the robber, would also be much straitened; for though it would be improper, and indeed impossible, to bring persons into public lodgings by constraint, yet the number of private lodging-houses would be greatly diminished, and if the plan of licensing them were adopted, it would become very difficult for criminals to avoid the pursuits of justice. Thus the two great objects, of preventing crimes, and facilitating the detection of the guilty, would be promoted.

To persons engaged in sedentary employments, or in those attended with little bodily labour within doors, which is the case in most of the Manchester manufactories, public lodgings might contribute much to the preservation of health, by affording them opportunities of using some agreeable exercise, such as cricket, on their return from work. At present,

ent, the workman, after leaving the warehouse, wastes his evening in the alehouse, or strolls about the streets and fields to a late hour, for the purpose of intrigue.

Next to personal cleanliness, and muscular exertion, the preservation of health depends on occasional changes of clothing. How far it would be practicable to promote this, by the aid of a public institution, must be a subject for discussion, if such an institution should ever be established. Infected, or foul strangers, might, at least, be accommodated, at a small expence, with flannel suits, till their own clothes should be washed or scowered, which is practised in some infirmaries, and ought to be insisted upon in all. Clubs are formed, in some parts of Manchester, for procuring clothes at a moderate price, and perhaps an extension of that plan would answer the purpose.

The establishment of sick clubs, at present liable to many abuses, might be advantageous-

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ly watched over by a committee of health. I have seen repeated instances, in which those clubs have displayed the most unfeeling avarice. It has often happened, that when an Infirmary patient has procured an attestation from me, that he was sick of a fever, his club has delayed the relief due to him for eight or ten days, in hopes, that the disease might cut him off, and deliver them from the burden of supporting him. I have been many times shocked, by the tyrannical conduct of mercenary overseers, who uniformly treat the poor as criminals, whom they are appointed to punish, but when the poor treat each other with cruelty, I learn to make some allowance for the insolence of those petty despots.

The distress and ruin of many families, arise from other circumstances, which might be easily prevented by a public committee. A young couple live very happily, till the woman is confined by her first lying-in. The cessation of her employment then produces a deficiency in their income, at a time when expences

expences unavoidably encrease. She therefore wants many comforts, and even the indulgences necessary to her situation: she becomes sickly, droops, and at last is laid up by a fever, or pneumonic complaint; the child dwindles, and frequently dies. The husband, unable to hire a nurse, gives up most of his time to attendance on his wife and child; his wages are reduced to a trifle; vexation and want render him at last diseased, and the whole family sometimes perishes, from the want of a small, timely supply, which their future industry would have amply repaid to the public. If such misery occurs, even when the master of the family is industrious and sober, it is easy to imagine the distress of those unfortunate creatures, who depend on a brutal debauchee. The injuries which defenceless women undergo, in those situations, are too horrible for description: I have met with many instances of incurable diseases, occasioned by kicks or blows from the husband, in his paroxysms of drunkenness. Scirrhus of the liver, and of the ovarium,

ovarium, and consequently the worst species of dropsy, have been thus produced.

It would be necessary to add a few rooms for the reception of the sick, to every institution of this kind. Those destined for persons who may be seized with fevers, notwithstanding the precautions enjoined, should be so contrived, as to seclude the sick from communication with every one, but the necessary attendants. A false opinion prevails respecting fever-wards: it is supposed that they perpetuate and extend infection. But I entertain no doubt, that under proper management, they would produce the very opposite effect. In our Infirmary, we are perpetually liable to have the contagion of fever introduced, either by the admission of patients in whom the disease is lurking, or by their receiving visits from persons coming out of infected houses. Formerly, when a fever began in the hospital, it was found necessary to dismiss almost all the patients, a measure pro-

 ductive

ductive of much inconvenience, and general alarm. But since a few rooms were built, in the year 1792, separated from the rest of the wards, for the reception of such cases, though the infection has been more than once introduced, yet by removing such patients as shewed symptoms of fever, at their first appearance, into the secluded ward, and preventing all communication between them or their nurses, and the other patients and servants, the progress of the complaint has been stopped, and no reason has again occurred, for a precipitate discharge of patients.

The necessity of such a plan as that I have suggested, may possibly seem doubtful to those who are not accustomed to visit the habitations of the poor; but I am fully convinced, by personal observation, that the ravages of such epidemics as that of 1794-5, cannot be effectually prevented, without some exertions of this kind. Should such a design ever be seriously agitated, the expences of the es-

tablishment

tablishment cannot form an objection, for attempts to secure the health and morals of the labouring poor, are certainly consistent with the true spirit of national œconomy.

DILATATION

of the

HEART.

DILATATION OF THE HEART.

In the former volume, I gave an account of several cases, in which this affection varied from the common descriptions which occur in medical books. I shall now add a few cases, in confirmation of what I have there advanced.

Sarah Moors, aged twelve, a girl of a very full habit, florid, and healthy in appearance, had been attacked by a violent palpitation of the heart, about a year and half before I saw her, in consequence of a rheumatic fever. The apex of the heart was felt to strike between the sixth and seventh ribs. She complained of orthopnœa, and was often obliged to sit up in bed all night. Her face often swelled; sometimes

sometimes her feet. She felt a pain and tingling in both arms, reaching to the points of her fingers; her pulse was quick; her urine natural. Pain across the breast was sometimes felt. She was directed to take the infusum digitalis, which was continued till it produced sickness, but no relief from the palpitation, though a small bleeding was interposed. The digitalis was then omitted, and she was put on a course of spiritus ætheris vitriolici. From this she derived considerable relief, and though her legs swelled occasionally, grew very tall, and strong. About five months after she came under my care, she had a more than common appearance of health and vigour, though the palpitation was encreasing; but after this effort of the system she began to languish, and was gradually reduced to the lowest degree of weakness. She died at a considerable distance from Manchester, so that I knew the particulars of the last stage only by report. The vitriolic spirit afforded some relief, till within a very short time of her death.

John

John Fletcher, mentioned before, complained of constant pain in the lower part of the abdomen, which sometimes extended upwards, to the region of the heart; the pain was so great, that he commonly lay upon his face. As he had no diarrhœa, no fever, nor any symptom of worms, and the functions of the bowels did not appear to be at all disturbed, I enquired whether he ever felt a palpitation of the heart, and being answered in the affirmative, I thought it proper to examine the breast. I found that the apex of the heart struck between the sixth and seventh ribs; the stroke gave a jarring sensation to the hand, and was visible to the eye. His pulse was feeble and hurried, his tongue clean. He had a dry cough. I ordered him to take thirty drops of tincture of castor thrice a-day, from which he derived considerable benefit for a time. The remainder of this case, I have given under another head *. This boy, at present (March 1795) has advanced very little in his growth, and will probably become

* On the Effects of Pneumatic Medicine.

become deformed, but his complexion and countenance are natural.

E. Larkin, a girl aged eleven, had been weak, and rather distorted for four years. About six weeks before I saw her, she was obliged to carry several pailfuls of water on her head, and then, for the first time, felt a palpitation of the heart. I found that the pulsation extended across the thorax, and somewhat upwards: the apex of the heart seemed to be nearly in its natural place; the carotid arteries palpitated strongly. Her pulse was frequent and feeble; her countenance pale. Her left foot and ancle swelled sometimes, and she occasionally complained of pain, just above the elbow of the left arm. She had also constant pain and soreness, at first below the scrobiculus cordis, afterwards in the hypogastric region, and of this she complained much more than of the palpitation. She took the spiritus ætheris vitriolici, and tincture of castor, without relief, for several months, and then, by my desire, suspended the use of medicine

medicine altogether. A month after she had discontinued her medicines, the œdema of the lower extremities disappeared, and the palpitation was rather less. From this time, I heard nothing of her till a year afterwards, when I found her nearly in the same state, certainly no worse; and as far as I could judge, from examining the motion of the heart, the dilatation seemed to have made no progress. I have never met with a case, in which the affected part of the heart was so clearly indicated. There was every reason to believe that the right auricle was dilated.

Samuel Holt, a house-painter, fifty-five years of age, had been subject to palpitations of the heart for three years. The stroke of the apex was felt near the tenth rib; it affected his head strongly, and even gave it an external motion. He often felt palpitations in his neck, and sometimes in his left arm. He could not lie upon his right side, in bed, nor easily on his left, and was sometimes obliged to turn upon his belly for relief. His face

face was usually swelled in the morning, and his legs swelled towards night. His belly was sometimes distended, and within the last six weeks, he had been subject to considerable pain in the lower part of it. The pulse was full, and quick; his urine rather scanty.

He had been frequently affected with inflammation in the great toe of the left foot, which was preceded by sickness, and came on about day-break, after his first sleep; this inflammation usually relieved the palpitation, and seemed to be approaching when I first saw him. About a year before, he had suffered a severe pneumonic attack, for which he was blistered.

He had been accustomed to paint dead colours, but was obliged, by the violence of his complaints, to relinquish his employment.

I ordered him to take half a grain of opium, with half a grain of digitalis, every five hours, and to drink a pint of the cerevisia diuretica daily.

daily. Next day he was easier, and the palpitation was diminished: his pulse was still quick, and rather full. Four days after, the toe inflamed; the palpitation was much lessened, and the pulse became considerably softer. The top of the foot was swelled, and there was a distinct gouty inflammation on it. Next day, the swelling and inflammation of the foot were decreased, and the palpitation returned with much violence. I directed the ancle to be blistered, and, as he was costive, opened his bowels with the infusion of senna. A week afterwards, the blister continued to discharge, and was very sore: the palpitation was less, but he complained of a troublesome cough. The palpitation continued to decrease after this period, till he thought himself well enough to be discharged. There never was any remarkable encrease of urine in this case, but I was not quite sure that the remedies were carefully administered, the patient being very capricious, and fond of prescribing for himself.

J. Blakeley,

J. Blakeley, aged eighteen, complained of constant palpitation of the heart, of three months standing. The apex seemed to strike considerably below the usual place. He was greatly relieved by taking digitalis with opium, in small doses, and drinking a pint of the cerevisia diuretica daily.

From these cases, it appears, that dilatations of the heart may be retarded in their progress, by different causes, and particularly by the action of diuretics; that in a certain stage of growth, dilatation of the heart is not incompatible with general fulness of the habit, and even, during a certain period, with some degree of vigour; and that local inflammation, whether produced by specific disease, or by the action of rubefacients, possesses a power of alleviating this complaint, even when supported by organic læsions of the heart itself. Hence, perhaps, the utility of issues, in cases of angina pectoris.

OF THE

EFFECTS

of

PNEUMATIC MEDICINE.

OF THE EFFECTS OF PNEUMATIC MEDICINE.

Since the publications of Dr. Beddoes on this subject have appeared, I have been desirous of trying what prospect of relief his method affords, in disorders which do not yield to ordinary remedies. Had I deferred this publication till I had collected a greater number of cases, my information might have been more satisfactory; but in the moment of enquiry, every additional testimony has its use. In the following cases, the species of air exhibited were procured from the apparatus constructed by Mr. Watt, according to the directions given in his pamphlet.

1. *William Whitehead* laboured under a confirmed pulmonary consumption, which had

been preceded by a spitting of blood. His cough was very harassing, his respiration difficult, his pulse quick, and his appetite nearly gone. On the first day of his using the hydrogene air, (which was prepared from vitriolic acid and iron filings, previous to the arrival of the apparatus) his pulse, at eleven in the forenoon, was 110. He complained of coldness in the extremities, after inspiring the contents of two bladders, in which the proportion of hydrogene was about a fourth. No alteration in his breathing was perceivable, during half an hour that I staid with him, after the exhibition of the air, but he remarked, that he did not cough again till the evening. He passed a restless night, yet next morning his pulse was only from 60 to 70. The air was now exhibited morning and evening, with evident relief of all his symptoms, and he slept well, with little disturbance from his cough, though the nights were frosty, and the weather was generally foggy. After continuing this plan for a week or two, we were accidentally obliged to suspend the use of the remedy, before

fore the arrival of Mr. Watt's apparatus. I had dropped all his other medicines on beginning to exhibit the hydrogene, and I now allowed several days to pass without renewing them. During this interval, he felt very great relief. His cough abated; his respiration became perfectly free; and his sleep and appetite returned. The hydrogene procured from the apparatus continued to relieve him, but it became necessary to encrease the proportion to a third. In the course of some weeks, however, the progress of the disease, and the rigour of the season, overpowered the effects of the hydrogene: it ceased to give ease, and was at length discontinued.

2. A lady had been afflicted, upwards of eleven years, with a severe spasmodic asthma. The paroxysms generally continued from twelve to twenty-four, or forty-eight hours, and were sometimes so violent, as to deprive her of respiration and pulse for several seconds. They commonly terminated with sickness and vomiting. During the last

two

two years and a half, they recurred more frequently, so that she was seldom free from them above four or five days together.

She began to use the hydrogene, in the proportion of a fourth, not long before the commencement of the hard frost, in January 1795. The state of the weather, on account of the sudden vicissitudes, could hardly have been more unfavourable.

She had used a great variety of remedies with little benefit. Opium relieved the spasms, but brought on a degree of nausea and debility hardly supportable. As she had been subject, several years before, to inflammatory complaints in the chest, and there was reason to apprehend that considerable adhesions of the pleura had taken place, I was induced to expect most benefit, in this case, from the hydrogene, or hydro-carbonate.

Great chillness in the limbs succeeded every exhibition of the air; the fits, however, were

were evidently postponed, for she enjoyed a more considerable interval of ease, than she had experienced for two years and a half, although the weather was very severe. The intense frost, to which she had always been remarkably sensible, at length brought on paroxysms, during which she used hydrogene, hydro-carbonate, and afterwards oxygene, without effect. The oxygene was exhibited, from the analogy of the action of spirituous liquors, which frequently terminate an incipient paroxysm, in this species of asthma. Discouraged by this ill success, the remedy was laid aside for a short time, but on the recurrence of a fresh paroxysm, the hydrogene was again given, in the proportion of a third, or rather more, in a bladder which contained about six quarts. The relief was not immediate, nor suddenly complete; but in the course of a quarter of an hour she was able to walk up stairs to her room, and passed a tolerable night. Another paroxysm was stopped, a few days afterwards, in the same manner. She is still liable to returns of the spasm, but

on

on the whole, has derived more relief from the pneumatic medicine, than from any other remedy.

3. *John Fletcher*, aged eleven, had a constant palpitation of the heart, attended with signs of a dilatation of that organ, which have been described in another place. He was relieved at first, by moderate doses of tincture of castor, but in the course of a year that medicine lost its power, though the dilatation did not seem to proceed with much rapidity. Conceiving that his distress might be lessened, by diminishing the stimulating power of the blood, I put him on a course of hydrogene, suspending all other remedies. For some time, he felt no sensible effect; at length, the proportion of hydrogene being encreased, giddiness came on after every dose, but the palpitation was not at all relieved. I then directed the hydro-carbonate air, which affected his head so much, that he dropt down after the last dose. Finding the palpitation not diminished, even after this trial,

I thought

I thought it prudent to discontinue the pneumatic course, and ordered him half a grain of digitalis every night at bed-time, which afforded temporary relief.

4. I administered a dose of oxygene, in the usual proportion, to a man who had long been an out-patient of the Infirmary, on account of an asthma, which had been formerly relieved by the free use of bark and opium. He felt great relief, immediately on inspiring the air, and said, that if his present feelings could be continued, he should think himself well. His death, which took place suddenly, a few days after, disappointed me in the expectations I had formed, from the commencement of the course.

5. *B. Knowles*, a middle-aged man, had been affected with a severe cough, during five years; his expectoration was not considerable, but he was greatly emaciated. The adnata of both eyes was of a pearly white: his pulse was small, and generally above an hundred.

hundred. He took the hydrogene in different proportions, with little or no sensible effect. At length, by repeating the administration of the air three or four times a-day, he complained of much giddiness, but did not feel his cough relieved, nor was his pulse materially altered. The hydro-carbonate was afterwards used, and the event was precisely the same. The course was continued for a month, in the whole, and at the end of that time, he was no better in any respect. It was then discontinued, and he was relieved by the common demulcent remedies, with opium.

6. *Anne Banks*, twenty-one years of age, had complained for six weeks of severe cough, and copious expectoration. Her pulse was irregular, and much hurried, generally 110, or upwards. She had frequent rigors, night-sweats, her voice became feeble, and her countenance was rather sallow. The menses were irregular. On the 26th of March, I ordered her a dose of hydro-carbonate

bonate air, in the proportion of one-twentieth. Her pulse was encreased in frequency immediately, and she fancied herself rather easier, excepting that considerable giddiness was produced. During the rest of the day, she was much better than usual, and remarked that her voice was stronger than it had been at any time during her illness. I could not learn, however, that her cough had been diminished. She slept better at night, probably in consequence of taking an opiate. She returned next day to the hospital, and took another dose of the air, but not finding so much relief as at first, she did not come again for several days. April 2d, she had a dose of the hydro-carbonate in my presence: the proportion was one-twentieth, in a bladder which could not contain above a quart. Her pulse became more frequent, and was about 120, after she had inspired the air. She perceived no other effect than slight giddiness from the dose; I therefore desired her to take another from the same bladder, which was filled again, with the same proportion of hydro-

hydro-carbonate. She drew in a very deep inspiration from the bladder, and immediately fainted; she revived almost instantly, and only complained of giddiness and confusion in her head. She continued to inspire the contents of one bladder, once a-day, with considerable relief. Her respiration became easier, and she slept better, though the night-sweats still recurred, and her cough was not diminished. Her pulse was still quick. On missing her dose of air one day, she said she had felt a want of it; that her breathing had been less free, and on the succeeding morning her expectoration was streaked with blood. April 7th, she had a severe rigor, after using the hydro-carbonate, her pulse continued quick, and her cough troublesome, but no more blood was expectorated. April 9th, her pulse was as much hurried as ever; her cough was not easier; but she thought her voice rather stronger. On the 10th, I found that she had prevailed on the person who administered the air, to encrease the proportion of hydro-carbonate to a fourth, which produced syncope.

syncope. She also complained of a head-ach, and a sense of tightness in the head, for several hours after each dose. I immediately ordered the proportion to be reduced to one-sixth, and that it should be exhibited thrice a-day. Her cough was now rather more troublesome, particularly in the night. April 13th, her pulse was frequent, but more irregular; she had passed two very restless nights, and her cough had been very distressing. I ordered the hydro-carbonate air to be omitted, and substituted the hydrogene in its place, in the proportion of one-half. April 14th, she had slept better since taking the hydrogene, her pulse was softer, but still irregular, the head-ach was gone, and her countenance was paler. Her cough was rather more troublesome. April 15, she had a stronger rigor than usual, to-day, succeeded by a severe hot fit; her cough was no better; her pulse was very quick, and her breathing much hurried. She felt no sensible effect from the hydrogene; it was therefore encreased to the proportion of two-thirds. The

bladder

bladder in which it was included contained about six quarts. April 16, she had slept better, and sweated less; her cough was nearly as usual; her pulse still very quick. She was directed to use the air three times a-day, that is, to take twelve quarts of the hydrogene in twenty-four hours. On the 17th, however, I found that, through some negligence, she had only used the air once on the preceding day. She had slept tolerably well, but was no better in any other respect. This morning, she was sick, and felt great coldness in her limbs, after inspiring the air. April 20th, she had rested better, and had not sweated for the last three nights. Her cough was nearly as troublesome as ever, but she spit less. She was more enfeebled, complained of want of spirits, and looked much worse. Her pulse was frequent, but languid. On the 21st, she had again slept well, and had not sweated. Her cough was not relieved. Her pulse was very irregular, and small, but she thought herself rather stronger. The air was accidentally omitted, till the next day, when she thought her cough rather

worse.

worse. The hydrogene was administered with great regularity, twice a-day, till the 26th, when her cough was not relieved; her expectoration was more copious and easier; she slept tolerably well, and had sweated a little during the last three or four nights. Her strength was not encreased; she looked more languid and emaciated, and could in no respect be pronounced better. I therefore directed the exhibition of the gas to be discontinued, but recollecting that *Whitehead* had been much relieved during the intermission of the hydrogene for a few days, I did not order any medicine in its place. After an interval of three or four days, no change of any kind appearing, I put her on a course of demulcents and opiates.

7. *Martha Adams*, about thirty years of age, was ill of a peripneumony. Finding the dyspnœa continue on the tenth day, after bleeding, blistering, and keeping the bowels very open, I thought it fair to try whether the use of unrespirable air would afford relief,

lief, as it might be expected to do, from Dr. Beddoes's theory. Mr. William Henry had the goodness to superintend the administration of the remedy. She inspired the contents of two bladders, each capable of containing a gallon; the hydrogene was mixed in the proportion of one-third. No sensible effect was produced. She took, at the same time, a mixture with opium, antimonial wine, and mucilage of gum arabic. April 20th, she had slept rather better, but her cough and dyspnœa were not at all relieved. I directed the hydrogene to be repeated. She again inspired the contents of the bladders, with the same proportion of hydrogene: after finishing, she felt herself sick, but was not sensible of any alteration in the state of her cough or breathing. As the gas had now produced a noxious effect, without giving relief, I thought it improper to repeat the experiment.

This case destroyed the flattering expectations which I had formed, of finding a powerful

erful auxiliary in this species of gas against pneumonic inflammation. Every circumstance was here favourable to its action. The inflammation was abating, when it was exhibited, yet it did not appear to accelerate recovery in the smallest degree.

8. *Helen Jones*, aged eighteen, had been ill for nine months, of an incessant cough, some expectoration, and night sweats. She laboured under severe dyspnœa, and her face was flushed, and much swelled. In the course of the disease, her legs swelled also. I put her on a course of hydro-carbonate, without any other remedy, and she persevered in it during six weeks. The air was given twice or thrice a-day, and the proportion was encreased occasionally, till it affected her head. She never derived one moment's relief from it. Finding her symptoms exasperated, and that her legs began to swell, I omitted the pneumatic course, and gave her digitalis, in conjunction with cream of tartar, assisted by common demulcents. She died,

about ten days after the omission of the gas. I considered this as a lost case from the first, otherwise I should have given up the exhibition of the gas much earlier.

On opening the body, the lungs were found perfectly full of tubercles, which, on being cut open, were seen to contain a caseous matter. There was no mark of suppuration in any part of the lungs. All the other viscera, in the thorax and abdomen, were completely sound.

From these cases, as far as they extend, we cannot draw any conclusion highly in favour of the pneumatic medicine. No benefit was obtained from a long course of it, in a case of tubercular phthisis, where it was ascertained by dissection that suppuration had not taken place. In a very recent case of phthisis, that of *Anne Banks*, the relief afforded by the hydrogene was very trifling, not equal to what I have produced in similar cases, by common methods of practice. But what has most

most disappointed me, is the want of efficacy of this medicine, in a curable disease, a common case of peripneumony, in which the patient recovered by the usual remedies. *Knowles*, also, (case 5th) was greatly relieved from his complaints, by ordinary medicines, after a long, ineffectual course of hydro-carbonate. I have no reason to suspect want of accuracy in administering the gases here. They were prepared exactly according to Mr. Watt's directions; in the beginning of most of the observations, they were exhibited in my presence, and I have carefully noted every accidental omission. That they were given in doses sufficiently strong, is evident, from the intoxication or deliquium which was produced in most of these instances. On the other hand, it must be confessed, that the hydrogene gave much relief to *Whitehead*, in the advanced state of phthisis, and that some benefit resulted from it, in a chronic asthma (No. 2). As far as my observation goes, therefore, I have only found the pneumatic medicine palliate, and even

that effect has proved but transitory. From the case, No. 3, no conclusion can be drawn.

I am aware, that no positive inference should be drawn, from the small number of cases in which I have employed this method; for I know that practitioners often meet with a series of cases, greatly favourable, or otherwise, to modes of practice, considered alone, which it is necessary to compare with the result of a great number of other cases, indiscriminately taken. I shall, therefore, continue to use the pneumatic medicine, but only in those disorders which prove intractable to common remedies, till I can arrive at certain conclusions respecting it. For I think it wholly inexcusable, to hazard the life of a poor patient, by substituting uncertain remedies, for those which experience justifies us in directing. But I confess that I shall proceed in my trials, with hopes much reduced, and with eagerness greatly abated.

I was induced, by Mr. Cartwright's account

count of the effects of yeast, in typhus, to order it in one case, in the intervals of administering the bark. The first dose produced such violent sickness, that I did not choose to pursue the experiment farther; and I understand, that the same effect has attended its exhibition by other practitioners.

Whatever may be the result of this enquiry, great praise is due to Dr. Beddoes, for the liberal manner in which he has communicated his ideas to the public. He has opened a new, and extensive train of observation, in which even disappointment may prove instructive, and in which success, if his pathological views could be realized, would place him high among the benefactors of mankind.

APPENDIX.

APPENDIX.

SOME REMARKS

on

Dr. Tattersall's

"BRIEF VIEW OF THE ANATOMICAL "ARGUMENTS FOR THE DOCTRINE OF "MATERIALISM."

Perhaps I ought to apologize for calling the public attention, to an attack, which has been made by Dr. Tattersall, of Liverpool, on my argument against the doctrine of materialism. As he has done nothing to elucidate the subject, and as the chief part of his pamphlet has no relation to my Essay, I should have left my reasoning to protect itself by its own force, had the Dr. conducted his assault in a liberal manner. But as he has employed

himself

himself chiefly in misrepresenting my words, and in throwing out very unjust and improper insinuations respecting my intentions, I think it necessary to expose his performance to the censure which it deserves.

It is impossible, however, to read Dr. T.'s serious objections to the motto of my Essay, without a smile. He chooses to consider it as a talisman, calculated to unnerve the "timid "and superstitious," whom the Dr. seems desirous of bringing within the circle of materialism, and whom nothing but his own conjuring rod can disenchant. It is singular enough, that his objections to the motto, and to the exordium, which he learnedly calls "extra-"neous matter," should turn upon this point, that they are calculated to engage my readers in favour of the opinion which I had undertaken to support. It is more singular, that he should suppose me to throw out lures to the vulgar and ignorant, in a tract addressed to a man of great knowledge, and splendid talents, and not calculated for the herd of readers. But

But it is not easy to discover the Dr.'s real opinion of this alarming exordium; for at p. 6, "This matter is so evidently ad- "dressed, *ad populum*, and so much calculat- "ed to engage vulgar prejudices in his [my] "favour, that an opponent is obliged to shew it "to be foreign from the purpose." But at p. 10, the same observations "might have some "propriety, when addressed to an old ac- "quaintance, and written in the sportiveness "of intimate friendship; but they are cer- "tainly improper in an author, writing grave- "ly upon a metaphysical subject, and ap- "pearing before the bar of the public." *Utrum horum?*

However, the Dr. has fully evinced his sense of the force of those introductory observations, by the artifices to which he has had recourse, in attempting to evade them. He quotes from me this passage; 'Hypoth- 'esis is a mistress not easily abandoned;' and adds, "This is very true; but I should "have thought that there would have

"been

" been greater propriety in a materialist, " whose doctrine is more modern, applying " such an observation to an immaterialist." The Dr. has here falsified my expression, that he might " shew it to be foreign from " the purpose." I had said, 'hypothesis is a ' mistress not easily abandoned, and *equally* ' *courted by philosophers of both sides* †.' This cautious suppression of one clause of the sentence, for the purpose of affixing his own sense to the rest, contrary to my meaning, might, if it were a single instance, pass for the effect of habitual inaccuracy, or want of comprehension. But in the very next page, (8) we meet with another passage, falsified in the same manner. " I think," says he, " that " the writers," who 'seem to have inherited ' the spirit of the old Grecian in the present ' contest,' " have been the advocates for immateriality; and that they are the persons " who

† Memoirs of the Lit. and Philos. Society of Manchester, vol. 4. p. 21.

" who have run their metaphysical career,
" without stopping to enquire for facts.

" If I consider either the persons who
" have defended materialism, or the ability
" with which they have conducted the de-
" fence of it, I cannot think that a quotation
" from Homer, respecting boys describing
" fanciful figures upon sand, and wantonly
" destroying them again, is applicable to such
" men, or to their writings *."

Would not any one imagine from these strictures, that I had abused the writers in favour of materialism, without decency or discrimination? Now the *complete* passage in my Essay runs thus. ' Many writers seem to
' have inherited the spirit of the old Grecian
' [Democritus] in the present contest. They
' have run their metaphysical career, without
' stopping to enquire for facts, and there has
' been great sport, in the erection and demo-
' lition

* P. 9.

'lition of the fanciful opinions *which each* '*party has brought into play.*'—Then followed the quotation from the Iliad. It is evident that I meant, in this passage, to censure bad writers on both sides of the question. Every sophist may be said to have eaten of the figs of Democritus; and my remark and quotation may be applied to all disingenuous writers, who hope to raise themselves into notice, by misrepresenting the opinions and expressions of others, and then amusing themselves with the boyish destruction of their own dirty work.

When I compared the conduct of some champions of materialism, to that of Caligula, who is said to have declined meeting his enemy, and to have contented himself with parading on the strand, where no resistance was offered, I did not expect to be attacked by an antagonist, who should prove another instance of the truth of my observation. Yet Dr. T. after a faint skirmish with my argument,

ment, has faced about, and fallen upon the doctrine of spirit, of which I had not said one word, with his "anatomical argument," in which I can discover nothing anatomical.

But even this is nothing, when compared with the bravado in p. 10, where the *Dr.* seems determined that no man shall write, or object seriously against the doctrine of materialism. To answer this passage gravely, would really "exceed all power of face." I have never understood that materialism was so firmly established, as to subject its fair opponents to any censure, excepting that of some bigots, who seem resolved to support it at any price.

In answer to the facts alledged by me, Dr. T. says, he "could produce a thousand tes- "timonies from medical authors, of the high- "est authority, to the assertion, that when "the structure of the brain has been injured, "the process of thought has been impeded "and

"and changed *." Certainly this has always been reckoned the strong-hold of the materialists. To deprive them of it, by producing opposite facts, and to shew the perplexity attending the boasted mechanical theory of thinking, were the objects of my Essay. Dr. T. has objected to the facts, first, according to his laudable custom, by misrepresentation. "It is only asserted," says he, "that one part "of the structure has been injured at one "time †." To shew the falsehood of this statement, I need only to refer to my own assertion, which he had quoted in p. 11; that, 'at different times, every part of the structure 'had been deeply injured, or totally destroy-'ed.' But besides several cases of extensive injury, I had given instances of universal depravation of structure, in p. 42 and 43 of my Essay.

Another instance of Dr. T.'s practice of garbling arguments, occurs in p. 12. "Dr. F. "says," 'when the parts of the brain which, 'in

* P. 11. † P. 12.

'in common language, give origin to the 'nerves supplying those organs, are injured, 'the senses are in general proportionably 'affected.' "This we all know, and I "should have thought it would have made "against him; but he says, it" 'seems to 'point out a difference in the causes of 'thought, and sensation.' "I do not know "what he can mean by the causes of thought, "as distinct from the causes of sensation. "Have we any other ideas than those of sen- "sation*?" This, as Dr. Tattersall has stated it, is certainly nonsense, but he has made the blunder, for the sake of combating it. My reasoning was this: any part of the brain may be destroyed without injuring the intellectual powers; but no part of the brain subservient to the organs of sense can be injured, without proportionably affecting the functions of those organs. There seems, therefore, to be a difference between the cause of thought, and the cause of sensation, that is, supposing the brain to contribute to both.

I now

* P. 13.

I now come to the only objections which relate to the essential part of my Essay. "It "appears," he says, "from my own account, "that the injuries of the brain were some-"times followed by injury of the faculties*." And he refers to two cases, quoted from Sir John Pringle, in one of which "it is said, that "the patient was not altogether insensible†." Sir John Pringle's words, as quoted in my Essay, are, that the patient *had never been delirious*, nor altogether insensible‡. In the other case, the patient 'answered reasonably 'when spoken to,' from which Dr. T. concludes, that his faculties must have been impaired ¶. In the case quoted from Morgagni, the senses 'were not affected till the 'last, and then not permanently;' Dr. T. therefore, supposes that they *must* have been affected early ||, and in proportion to the disease of the cerebellum. In three other cases, the

* P. 13. † Ib.

‡ Manchester Society's Memoirs, vol. 4. p. 24.

¶ Brief View, p. 13. || P. 14.

the faculties were occasionally disturbed, but in general were unimpaired. "As in these "cases," says Dr. T. "the injuries of the "brain were accompanied with injury of the "faculties, is it not a fair inference to say "that, in the other cases, the tendency to in- "tellectual, was in exact proportion to the "greatness of the corporeal injury †?" Certainly not. From a great number of cases quoted by me, Dr. T. selects *five*, in *three* only of which some temporary læsion of the faculties is mentioned. Even if I should throw those three cases out of the question, the majority of positive facts, on which my argument is founded, would remain totally uninjured. But in those three cases, the affection of the faculties was by no means proportioned to the injury of the brain; on the contrary, the patients enjoyed their exercise, during the greater part of the disease. In the two cases taken from Sir John Pringle, the insensibility was a sign of the diminution of life, but the faculties were entire, as far as the

* P. 14.

the decay of life permitted their exertion, which appears from the restoration of the clause Dr. T. had so uncandidly suppressed.

In the great body of evidence which I have produced, the proof of integrity of the intellectual powers, is full and decisive; and this observation brings me to the next remark, in this curious piece of logic; that, "nothing can be more loose and vague, than "accounts of persons retaining their faculties till death *". Of the subsequent ribaldry I disdain to take any notice, but I must observe, that an assertion of this kind is very surprising, when it comes from a medical man. He ought to have known, that in all cases of injury done to the brain, the state of the intellectual faculties is an object of the strictest attention, and is always particularly mentioned in descriptions of such complaints. It is more surprising, that any man who can read should make such an assertion, with the collection contained in my Essay before him.

Dr.

* P. 15.

Dr. T. pursuing his mirepresentations, makes me rest the proof of my general position, on a single case of Diemerbroeck's. Diemerbroeck says of a patient, under his own inspection, that after receiving a thrust with a sword through a considerable part of the brain, he talked for several days with his companions, properly, and with sound judgment, concerning different subjects. This account is neither loose nor vague. Dr. T. is therefore "obliged" to deny it, and to depreciate the writer's character. Diemerbroeck is certainly an author of credit: in relating what fell under his own observation, his authority has never been questioned *. He was a demonologist, like most of the physicians of his time. But men acquainted with medical literature, know how to distinguish between the errors of the age, and those arising from an author's own weakness. No one would refuse

* It is a curious circumstance, that Diemerbroeck mentions the efficacy of ink, externally applied to burns or scalds, which the late Mr. Hunter announced to the Royal Society, as the discovery of a Mr. Clark, of Edinburgh.

refuse a pathological fact, unconnected with demonology, from Dr. Hoffman, because he wrote his Essay, *De Diaboli Potentia in Corpora.*

But Dr. T. has not thought proper to reply to the case from Du Verney *, in which "the faculties were entirely unimpaired, till "death; *insomuch that some of his medical at-"tendants pronounced it impossible that the brain "should be injured:*" or to that from Petit (p. 29) where he asserts, that the patient's faculties were *perfect to the last*: or to Haller's expression, *etiam cum integritate mentis*: (p. 28) or to the case I have mentioned (p. 43) where the patient died, *in perfect possession of her intellectual powers.* If this be "loose and "vague" evidence, if these, and my other cases are not taken from respectable authorities,

Nil intra est oleam, nil extra est in nuce duri.

The hardiest of Dr. T.'s blunders occurs

* Argument against materialism, p. 34.

curs at p. 18, in which he denies that the brain was diseased, in some cases mentioned by me.

In one of them (p. 42) the brain was in a liquid state: in another, "the whole sub-"stance was *watery*, and so soft, that it would "hardly bear the knife." In a third, besides water in the ventricles, and an effusion of blood upon the tentorium, "there seem-"ed to be a total change in the consistence "and colour of the brain throughout. It "would scarcely bear either handling or cut-"ting, and the parts were uncommonly in-"distinct." If Dr. T. supposes these to be healthy states of the brain, he might have saved himself a great deal of trouble; for he might, with equal truth, have denied the existence of disease, in every case which I had produced.

To finish his remarks, Dr. T. brings out an argument, which he had picked up from the Monthly Review; "that as long as the "sensorium

"sensorium shall continue, according to the "immaterialist, in a condition to be the in-"strument, the materialist will contend that "it may be the cause of thought *." I apprehend that the terms are by no means convertible here; at least, upon any theory of materialism hitherto stated. The facts which I have produced, destroy the mechanical theory of thinking; for in what mere machine can it be shewn, that every part, singly considered, is not essential to the functions of the whole? If the materialists, in consequence of my statement, choose to deny that the brain has any connexion with thought, that would be a very important change of ground, and it would remain to be seen, how they could support themselves in their new position.

The remaining part of Dr. T.'s pamphlet contains the common-place arguments against the doctrine of spirit, which require no notice from me. I have deemed it proper to vindicate

* P. 20.

vindicate myself against a series of most illiberal misrepresentations, but I do not think it necessary to go beyond the views of my original Essay.

Tum si quis est qui dictum in se INCLEMENTIUS
Existimavit esse, sic existimet,
RESPONSUM, NON DICTUM ESSE, QUIA LÆSIT PRIOR. *Terent.*

FINIS.